

For Reference

NOT TO BE TAKEN FROM THIS ROOM

Ex LIBRIS
UNIVERSITATIS
ALBERTAEISIS



THE UNIVERSITY OF ALBERTA

RELEASE FORM

I. LEVENTAL

EXPLORING AUDIENCE DEVELOPMENT FOR LIVE THEATRE:
THE CASE OF THE UNIVERSITY ENVIRONMENT

DEGREE OF MASTER OF BUSINESS ADMINISTRATION
SPRING, 1982

Permission is hereby granted to THE UNIVERSITY
OF ALBERTA LIBRARY to reproduce single copies of
this thesis and to lend or sell such copies for
private, scholarly or scientific research purposes
only.

The author reserves other publication rights,
and neither the thesis nor extensive extracts from
it may be printed or otherwise reproduced without
the author's written permission.

THE UNIVERSITY OF ALBERTA

EXPLORING AUDIENCE DEVELOPMENT FOR LIVE THEATRE:
THE CASE OF THE UNIVERSITY ENVIRONMENT

by



I. Levental

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF BUSINESS ADMINISTRATION

DEPARTMENT OF MARKETING AND ECONOMIC ANALYSIS

EDMONTON, ALBERTA

SPRING, 1982

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and
recommend to the Faculty of Graduate Studies and Research,
for acceptance, a thesis entitled

EXPLORING AUDIENCE DEVELOPMENT FOR LIVE THEATRE:
THE CASE OF THE UNIVERSITY ENVIRONMENT

submitted by I. Levental
in partial fulfilment of the requirements for the degree
of Master of Business Administration.

ABSTRACT

The live theatre market can be divided into several segments, one of which is the university student population. While little research has been done to identify the needs and preferences of the group, this market segment represents a great potential for long and, in some instances, short-term audience development opportunities.

This study was conducted in Edmonton, the capital city of Alberta, Canada. With a population of close to half a million, it supports 11 professional and amateur theatre companies. The basis for this study was a survey conducted on the University of Alberta campus in the fall of 1981. 395 voluntarily submitted questionnaires were collected, 376 of which met the standards of the study.

The objective of the survey was to evaluate the needs and preferences of university students in order to arrive at the marketing mix most effective at attracting them to live theatre. The survey focused on the following issues:

- 1) Current and desired levels of attendance.
- 2) Prevalent reasons for the differences between the two.
- 3) Current and desired subscribership levels.
- 4) Reasons for buying theatre subscriptions.
- 5) Reasons for attending live theatre.
- 6) Popularity of plays by type and origin.
- 7) Preferences for different performance times, as a function of ticket prices.

- 8) Popularity of different advertising vehicles.
- 9) Purchasing habits for live theatre tickets.
- 10) Effects of theatre reviews on attendance.
- 11) Age and faculty of the respondents.

Results of the survey were analyzed in terms of the overall frequencies. Then, the prime choices were cross-tabulated along specific variables to form a series of two-dimensional matrices and the χ^2 tests of independence were conducted between these variables.

The results showed that while lack of time and money were the major obstacles for higher attendance of live theatre, the most important reason for attending was play content. While frequent attenders preferred serious drama, the infrequent ones elected comedy as their prime choice. Both groups expressed their desire to see more Canadian plays in theatres' repertoires. It was demonstrated, that students mostly buy their tickets in advance. While the subscription levels are low, there is a potential for improvement if the right marketing mix is employed. The results showed that there is a 50/50 chance that theatre reviews would affect attendance. Finally, it was found that the age distribution of the respondents generally followed that of the university population.

The study concluded that there exists a good opportunity for live theatres to attract more students, thus, establishing a long-term patronage. This patronage can be achieved through an effective marketing strategy based on

the consumer preferences and needs, which were researched in this thesis. They formed the basis for practical policy recommendations also outlined in this study.

Further research is needed to test the external validity of this study, in other words, to extend its findings to other populations of university students.

ACKNOWLEDGEMENTS

This study would not be possible without the generous help of several people to whom I would like to express my sincere thanks. I am grateful to my advisor, Professor M.J. Dunn for his constructive criticism, guidance and encouragement without which this study would remain a dream. My appreciation goes to Professor C.A.F. Padfield who generously shared his knowledge on audience development. To him and to Professor D. Cullen I wish to convey my sincere gratitude for being a part of the examination committee. Very special thanks go to Keith Digby, artistic director of the Phoenix Theatre in Edmonton for his dedicated effort to bring this study close to the real world. I am also thankful to Agnes Lau and Bernard Chung for being an integral part of the survey and to all volunteers who gave their busy time to see it to successful completion.

My sincere appreciation goes to my wife, Jessica, for jeopardizing her studies for my sake.

I am also very indebted to Marvelyn Albert for typing this manuscript with great proficiency and interest.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
II. CONCEPTUAL FRAMEWORK	5
Importance of Audience Development	5
Who are the Patrons?	7
The Research Objective	15
III. SURVEY DESIGN AND METHODOLOGY	17
Survey Procedure and Organization	17
The Sample	21
The Questionnaire	25
Analysis of Results	33
Analysis of Frequencies	33
Analysis of Subsequent Groupings	34
Statistical Analysis	34
The Applicability of Student's Test	35
Cross-Tabulation and Independence Tests	36
Actual Vs. Sampled Age Distribution	38
Quality of Results	39
IV. ANALYSIS OF RESULTS	40
Scope	40
Current and Potential Attendance of Life Theatre	42
Popularity of Live Theatre Compared to Other Forms of Entertainment	43
Current and Potential Subscribership to Live Theatre	44
Reasons for Attending Live Theatre	51

	PAGE
Play Preference by Type and Origin	55
Ticket Preference as Related to Days of the Week and Price Effectiveness of Different Sources of Advertisement	67
Effectiveness of Different Sources of Advertisement	67
Effects of Theatre Reviews on Theatre Attendance	75
Preferred Ways of Buying Theatre Tickets .	77
Distribution of Respondents by Area of Study and Age	82
V. CONCLUSIONS AND RECOMMENDATIONS	85
FOOTNOTES	95
BIBLIOGRAPHY	98
APPENDIX A. THE SURVEY	101
APPENDIX B. TABLES OF SURVEY RESULTS	107

LIST OF TABLES

Table	Description	Page
I-1	Selected Data on Theatre Attendance and Number of Staged Performances for Different Canadian Provinces	1
I-2	Sources of Revenue for Live Theatre in Edmonton	3
III-1	Frequency of Attendance of Live Theatre Related to Type of Occupation	24
IV-1	Subscribership to Live Theatre as Related to Subscribership to Classical Musical Events and Movie Theatre Memberships	45
IV-2	Distribution of Potential Subscribers Among Frequent and Infrequent Theatre Attenders	46
IV-3	Distribution of Live Theatre Subscribers Among Frequent Live Theatre Attenders	48
IV-4	Distribution of Live Theatre Subscribers by Age	49
IV-5	Distribution of Attractions to Live Theatre Among Frequent and Infrequent Theatre Attenders	53
IV-6	Distribution of Prime Reasons for Attending Among Live Theatre Subscribers and Non-Subscribers	54
IV-7	Distribution of Prime Choices for Play Types by Age	57
IV-8	Distribution of Play Type Preferences Among Frequent and Infrequent Theatre Attenders	59
IV-9	Distribution of Play Type Preferences Among Live Theatre Subscribers and Non-Subscribers	60
IV-10	Distribution of Prime Choices for Play Origin vs. Age	62
IV-11	Distribution of Prime Choices for Play Origin Among Frequent and Infrequent Live Theatre Attenders	63

Table	Description	Page
IV-12	Distribution of Prime Choices for Play Origin Among Live Theatre Subscribers and Non-Subscribers	66
IV-13	Distribution of Preferences for Days of Attendance of Live Theatre	68
IV-14	Distribution of Attendance Day Preference Among Frequent and Infrequent Live Theatre Attenders	69
IV-15	Distribution of Attendance Day Preferred Among Live Theatre Subscribers and Non-Subscribers	70
IV-16	Description of Prime Choices of Advertising Media by Age	72
IV-17	Popularity of Different Advertising Media Among Frequent and Infrequent Life Theatre Attenders	74
IV-18	Popularity of Different Advertising Media Among Live Theatre Subscribers and Non-Subscribers	76
IV-19	Distribution of Buying Practices Among Frequent and Infrequent Live Theatre Attenders	78
IV-20	Distribution of Buying Practices Among Live Theatre Subscribers and Non-Subscribers	79
IV-21	Distribution of Ticket Buying Practices Among Attenders of Different Age Groups	81
IV-22	Distribution of Frequent Live Theatre Attenders by Age	83
1	Market Potential for Live Theatre. Reasons for the Difference Between Actual and the Desired Attendance	108
2	Entertainment Preference for the Value of \$10.00	109

Table	Description	Page
3	Current and Potential Subscription to Various Events	110
4	Reasons for Buying Season Subscriptions	111
5	The Ranking of Reasons for Attending Live Theatre	112
6	Play Preference by Type and Origin	113
7	Ticket Preference for Different Days At Different Prices	114
8	Effectiveness of Various Advertising Media Sources	115
9	Influence of Theatre Reviews on Decision to Attend	116
10	Preferred Ways of Buying Theatre Tickets	116
11	Distribution of Respondents by Area of Study.	116
12	Age Distribution of Respondents	117
13	Popularity of Promotional Vehicles Among Respondents of the Under-20 Age Bracket	118
14	Popularity of Promotional Vehicles Among Respondents of the 20-25 Age Bracket	119
15	Popularity of Promotional Vehicles Among Respondents of the 26-40 Age Bracket	120
16	Popularity of Promotional Vehicles Among Theatre Subscribers	121
17	Popularity of Promotional Vehicles Among Frequent Theatre Patrons	122
18	Purchasing Habits of Frequent Theatre Patrons	123
19	Purchasing Habits of Theatre Subscribers	124

Table	Description	Page
20	Additional Subscription Sales Potential for Current Subscription Holders	125
21	Importance Attributed to Different Reasons for Buying Subscriptions by Current Subscribers	126
22	Attitudes Toward Drama by Age	127
23	Attitudes Toward Comedy by Age	128
24	Attitudes Toward Drama and Comedy by Frequent Theatre Patrons	129
25	Attitude Toward Ticket Price by Frequent Theatre Patrons	130
26	Comparison of Age Distribution Between the Overall University Population and Respondents' Sample Using Normal Distribution	131
27	Summary of Statistical Analysis Using χ^2 Method	132

CHAPTER I
INTRODUCTION

Edmonton is the capital city of Alberta, one of 10 Canadian provinces. Alberta is primarily known as the energy and agricultural area of the country, while its artistic or more specifically, theatrical contributions, are often overlooked. As shown in Table I-1, in 1977 Alberta stood third in the number of stage performances produced, immediately behind Quebec and Ontario, which made it number one in terms of the number of performances produced that year per capita. Furthermore, Statistics Canada (1980) also shows that in 1977 Alberta and Ontario had the highest percentage of the theatre going population, 34%, which surpasses such culturally established provinces as Quebec, Manitoba and British Columbia. In absolute terms, though, Alberta was third in attendance of live theatre (422,000).

Table I-1
Selected Data on Theatre Attendance
and Number of Staged Performances
for Different Canadian Provinces

<u>Province</u>	<u>Attendance, 000's</u>	<u>Number of Performances</u>
Quebec	1,295	3,273
Ontario	1,408	3,548
Manitoba and Saskatchewan	253	731
Alberta	422	2,301
British Columbia	362	1,814

Source: Statistics Canada, 1980

To understand the reasons for this phenomenon one would have to turn to DiMaggio et al (1978) who on the basis of 270 surveys of 1200 cultural institutions concluded that the culture-consuming public, among other characteristics, had a generally higher income. While not a major factor, the high degree of economic growth in Alberta has been partly conducive to an increase in interest toward live theatre.

Traditionally, live theatres in Alberta have been concentrated in its major cities, Edmonton and Calgary. Edmonton alone has a population of 491,359, while 134,422 live within 30 minutes from the city (Padfield, 1980). In the 1980-1981 season there were 11 professional and amateur theatre companies to serve this population. Edmonton's major theatre, The Citadel, housed in its new (1979) building with two stages (total capacity - 880 seats) is widely known within and without the city boundaries. Located in the downtown core, it has enjoyed nearly sold-out performances since its first season in the new building. Attendance has also been healthy in the rest of the live theatres.

The box-office revenues have been complemented by funds from the public and private sectors. In fact, as it is indicated in Table I-2, based on the average figure for three major theatre companies in Edmonton, the total portion of grants from three levels of government as a percentage of the total sources of revenue amounted to 33.4%, while

private sources constituted 14.7% of the total revenue.

Table I-2

Sources of Revenue for Live Theatres
in Edmonton*, %

	<u>% Total</u>
Earned	51.9
Federal Government	11.4
Provincial Government	19.1
Municipal Government	2.9
Private	14.7

* Based on the three theatre averages
for Edmonton

Source: Padfield, C.A.F. The Performing Arts in Edmonton: An Important Industry.
University of Alberta, Unpublished Study, 1981.

This level of support has been contingent to a high degree on the attendance records of these theatres. To build up their audiences, live theatres have been conducting costly promotional campaigns to bring different groups of people to their performances. One of these groups is university students. Edmonton is the home of the University of Alberta (U of A), where the population of full-time students for the 1981-1982 school year, according to University statistics, amounted to 19,535. Needless to say, this population, as that of any other major University, represents an excellent potential for live theatres in their quest for audience build-up in the short and, particularly, the long run. Yet very little is known about the means of attracting this

population segment to live theatre.

Recognizing the utility of research into the needs and attitudes of university students as related to live theatre, the primary objective of this study is to identify the prevailing views held by university students and incorporate the findings into an effective strategy designed to increase their attendance at a minimum cost to the performing arts organizations. This study is based on a survey conducted on the U of A campus in the fall of 1981. Its results are presented in the light of past research on audience development and are statistically analyzed.

In an endeavor to broaden the composition of the theatre attending public and thereby secure the future well-being of live theatres, the findings of this thesis should demonstrate the means for conducting an effective marketing effort designed to attract university students to live theatre performances.

The study begins with an indepth analysis of the conceptual framework based on a review of pertinent literature (Chapter II). It further outlines the methodology employed in preparation of the thesis (Chapter III) followed by presentation and analysis of the obtained results (Chapter IV). These results serve as a basis for drawing conclusions and making policy recommendations (Chapter V). The actual text of the survey is presented in Appendix A. Appendix B represents a collection of tables, that summarize some of the obtained results.

CONCEPTUAL FRAMEWORKIMPORTANCE OF AUDIENCE DEVELOPMENT

A number of publications devoted to the analysis of performing arts audiences have appeared during the last 10-20 years. A majority of these publications have focussed on the analysis of "attending audiences" (as opposed to potential audiences). More specifically, certain socio-demographic characteristics of the audiences, such as gender, age, education, occupation, and income, were examined. Baumol and Bowen (1966) in their "landmark work"⁽¹⁾ - as DiMaggio et al put it - gave a four dimension explanation for the concern about audience composition:

- 1) If the arts are a positive social good we have to be concerned about those who are deprived of them.
- 2) A knowledge or appreciation of the audience forms the basis for policy decisions such as ticket pricing.
- 3) The nature and composition of the performing arts attending audience is of concern to the Government, which provides financial support to a great number of performing art institutions.
- 4) The audience make-up analysis provides information about the consumer which is essential for the effective marketing of the performing arts.

The socio-demographic analysis can be complemented by an evaluation of consumer tastes and preferences, to better suit the market that the performing arts organizations serve. Heitmann and Crocken (1976) recommend that a survey

may "suggest some of the 'costs' involved in staging the 'wrong' production"⁽²⁾.

Danny Newman disagrees, however, and "still turns pale when the word 'survey' comes up"⁽³⁾. A strong advocate of the Dynamic Subscription Promotion (DSP) system, he proposes an aggressive subscription drive in place of a step-by-step progression toward audience build-up, the latter of which would obviously include a survey of the market in its initial stage. This difference in opinions can be attributed to Heitmann and Crocken's concern about considering "the product as well as the sale of the product"⁽⁴⁾. The latter factor is evidently missing in Newman's arguments.

Audience build-up is essential for the livelihood of a performing arts organization. Theatres with strong attendance records receive not only considerable revenue from their box office sales, but also become prime candidates for private and governmental grants. Imperial Oil Ltd., one of the leading sponsors of the fine arts in Canada, stated that its grants are aimed at helping arts organizations "attain more self-earned revenue by helping broaden and enlarge their audiences"⁽⁵⁾. Consequently, failure to efficiently allocate the funds received from corporate sponsors to build up audiences will make these funds more difficult to obtain in the future. Needless to say, the allocation of taxpayers' money toward ventures with limited public appeal will also be curtailed.

WHO ARE THE PATRONS?

So, who are the patrons of the performing arts? Book and Globerman (1975) state that "the common stereotype of the performing arts audience member is that he, or more likely she, is rich, very well educated, from the professional or managerial occupations, and at least middle aged".⁽⁶⁾

This observation concurs with the conclusions drawn by DiMaggio et al who examined 270 audience studies. In fact, Book and Globerman go one step further and state that "of the two basic demographic characteristics, income and education, the latter is the more important as a factor in arts attendance".⁽⁷⁾ They found that 63% of 100 randomly selected Ontario audiences of performing arts events had at least some University education. Padfield (1980), in his analysis of Edmonton audiences, observed that at least 60% of the sample had a minimum of a few years of university education. These results indicate, as Padfield (1980) put it, that among the performing arts patrons, "the individual with no university education is in the minority"⁽⁸⁾. Consequently, it is rather difficult to overemphasize the importance of an early introduction of university students to the performing arts. In fact, Bradley and Ward (1979, I) found that over 50% of the seventy-nine surveyed audiences across the country attended their first play before the age of 16, which means that "the younger a person was when first attending a live performance, the more likely he or she is to be a frequent

attender as an adult" (9). It is, therefore, essential for performing arts organizations to find the means of attracting younger people to their doors. Crooks (1979) found, however, that live theatre is well attended by the 15 to 25 year age bracket. 37% of that population group has attended live theatre at least once during the previous 12-month period. In fact, had there not been constraints imposed by a lack of time and money - as testified to by the respondents - the attendance rate may have been higher.

Is it possible to conceive that a greater portion of the student population will become theatre subscribers? Ryans and Weinberg (1978), in their study of consumer dynamics in non-profit organizations, identified three stages of theatre involvement patterns for the five-year period under study:

- 1) No involvement - no attendance of the theatre under study.
- 2) Some involvement - the respondent attended one or more performances per season.
- 3) Subscriber - the respondent was a subscriber for that season.

They found that students belonged to the category of gradual subscribers, who, being limited by time and a wide choice of cultural events and other activities, first exhibited no attendance of live theatre. This was followed by limited attendance, which eventually led to subscription

patronage. In light of this classification, university students would probably fall into the category of some involvement (no. 2 above), where by virtue of course exposure or peer influence students start attending theatre. They do not, as a rule, become subscribers, but rather "students are generally better represented among the infrequent attenders, perhaps because their studies or their social activities keep them too busy or because they cannot afford to attend very often, though the availability of reduced rate student tickets may cast doubt on this latter explanation"⁽¹⁰⁾. This availability, however, has always been limited because theatres have tried to smoothen attendance levels (i.e. the adjustment of ticket price and student discount to the popularity of the performance day). Student discounts are usually offered for Sunday matinee performances, yet that is the very time when students generally try to catch up with their homework. These limited time arrangements do not combat the problem of students having minimal amounts of free time and do not take advantage of "a sizable potential for specially discounted performing arts subscription sales to students in all communities, particularly at the university level"⁽¹¹⁾. Neither do they take advantage of the potential for single ticket sales. The latter, in particular, broadens the scope of theatre attendance, which in turn brings new subscriptions in the subsequent stages. Instead, theatre companies have sought mainly to instill

loyalty in their old audiences, thereby establishing a purified group of patrons. It is relevant to suggest that to a large extent this policy means survival for these organizations, but it does also limit the possibility for new audiences to become a part of the theatre-going public. Airlines may be considered as an example of a half-way approach. With price discrimination policies (i.e. the system of regular economy vs. chartered fares) they managed to develop a larger population of air travellers. In the case of performing arts organizations, the daily allocation of a limited number of rush tickets could pay off in the long run by attracting new population groups to its doors. But that is not all. A considerable amount of research has been conducted to a) obtain a better understanding of the tastes and preferences of the theatre-going public in general and the student market in particular, and b) try to predict their attendance.

The latter aspect was studied by Andersen and Belk (1980). On the basis of regression analysis they found that positive correlations existed between the likelihood of attending live theatre and a) the likelihood of attending the symphony, and b) attitudes held toward the symphony. This result has a direct application to marketing practices as potential theatre attenders can be found on the symphony mailing lists. This observation, in fact, can be expanded to other audiences. Padfield (1980) found that a great deal of inter-subscribership existed between various

live theatres as well as between live theatres and the opera, the ballet, and the symphony in Edmonton. Can it be assumed, therefore, that there is a common, primary reason for buying a subscription? Ryans and Weinberg (1978) identified three groups of subscribers: continual, gradual, and sudden. The differentiation between these groups was based on the sequence of stages of involvement in theatre subscribership (see discussion above). While the gradual subscribers went through the first, then the second and third stages, the sudden subscribers by-passed the second stage, and the continual subscribers stayed as such for the period under study. Ryans and Weinberg found that while certainty of ticket availability and priority seating were the most popular reasons for subscribing to the American Conservatory Theatre (ACT) (the subject of their study, which had sold out most of its subscription performances), the sudden subscribers placed relatively more emphasis on the ease of ordering and less emphasis on the price discounts; continual subscribers, though, placed relatively more emphasis on the aspect of support for the ACT.

The fact that price discounts were generally on the list of major benefits sought by consumers coincides with Newman's (1977) contention that when theatres get to the stage of 100% sell-out by subscription, minor benefits can be drawn by continuing to sell subscription tickets at a discount. But in the case of not completely sold out

theatres, Ryans and Weinberg's itemization of the benefits by subscription patronage does not complete the picture. Considerations such as play content, star(s), special effects, etc. - in other words, the qualitative aspects of a play - would have to be included. In fact, they apply not only to theatre subscribers but to the entire range of theatregoers, including single-ticket buyers. As Newman (1977), Baumol and Bowen (1966) observed, most members of the student population are single-ticket buyers. These patrons are more selective with regard to play type and origin, more diverse in their attitudes toward live theatre, and more influenced by such factors as adverse weather conditions and negative theatre reviews (Newman, 1977).

These individuals represent the most difficult population segment to attract to live theatre. Yet they do attend performing arts productions and some of them do eventually become subscribers. In order to reach these individuals, theatres must utilize their promotional resources effectively, since "for many performing arts organizations, measuring out their often meagre and insufficient promotional monies in an eyedropper, so to speak, the directions in which these monies are spent - and the knowledge that they are well spent - is of extreme importance".⁽¹²⁾

Bradley and Ward (1979, II), Padfield (1980), and Book and Globerman (1975) have analyzed this aspect. All of the above researchers have demonstrated that the most

popular sources of information were newspapers and word of mouth. Naturally, this phenomenon would apply more significantly to single-ticket buyers, as subscribers tend to attend at the time designated by the schedule in their brochures. In fact, Newman (1977) argued that brochures should be the major vehicle for audience development, and that "newspaper advertising can be used to buttress large scale subscription mailings" (13).

In summary, the importance of live theatre cannot be assessed solely on the basis of its cultural and spiritual merits to our society. There are also significant synergistic effects that performing arts organizations have on the well-being of communities where they reside. Padfield (1981), in his analysis of six performing arts organizations in Edmonton, showed that "for an investment of less than \$200,000 (\$170,825), Edmonton's economy benefitted to the tune of over \$6 million" (14).

The effective utilization of private and public funds to produce high quality productions for large audiences with a broad cultural and occupational cross-section is of great importance to the performing arts organizations. Audience surveys can serve as a reliable vehicle for achieving the greatest degree of effectiveness. In other words, "organizations in need of practical advice miss a gold mine of wisdom by neglecting to survey their audience." (15)

Padfield (1980) indicated that education was consistently the best predictor of theatre attendance. He found, however, that students represented the highest percentage (20.8%) of the non-attending population among different occupational groups. In fact, their fraction in the total population of patrons attending from 1 to 9 times a year was lower (15.5%), and over 10 times even lower yet (13.4%).

This observation poses an interesting question of why the student population is so small in the total spectrum of theatre attending population, while education is the most important predictor of attendance for live theatre. What are the obstacles that students have that prevent them from becoming frequent or at least infrequent attenders of the performing arts in general and live theatre in particular? And what can be done to eliminate these obstacles to effectively capture the interest toward live theatre of this normally significant in numbers population segment?

Execution of consumer analysis research in order to evaluate a set of needs, perceptions and preferences is one of the ways for administrators to come up with an effective policy for attracting university students to live theatres.

THE RESEARCH OBJECTIVE

This study focuses on the university population as a current and potential source of patrons of live theatre. Conducted on the University of Alberta campus in Edmonton, Alberta, Canada, it offers some indication of the attitudes, preferences, and expectations of this population segment. It investigates the relative popularity of live theatre compared to other forms of entertainment, evaluates the degrees of importance of some different reasons for buying subscriptions, and monitors current and potential subscribership. It aims at achieving a certain degree of understanding of the reasons why students go to live theatre, and what type(s) of plays they want to see. This study also examines the popularity of different sources of advertising media and the relative popularity of different performance times. It looks at the effects of theatre reviewers on theatre attendance. Finally, it evaluates some of the socio-demographic characteristics of the respondents' population.

This study analyzes the intrinsic set of attitudinal differences between groups (e.g. frequent/infrequent attenders; subscribers/non-subscribers; different age groups, etc.) and establishes the significance of these differences on the basis of statistical indicators. All these findings can be of great value to live theatre administrators, who are striving to broaden the composition of their audiences and recognize the importance of attracting younger people to the doors of their theatres.

Young people, as research shows, are gradual subscribers, future patrons, and sponsors of the performing arts.

CHAPTER III

SURVEY DESIGN AND METHODOLOGY

SURVEY PROCEDURE AND ORGANIZATION

The original purpose of the survey was to evaluate market opportunities for the Phoenix theatre in the university environment. It was, however, expanded to conduct an overall assessment of the current state and the future potential of this market segment in terms of its composition, preferences, attitudes and constraints as related to live theatre. Consequently, its ultimate objective was to establish the best means of attracting the university audience to live theatre performances. In other words, it purported to go beyond the socio-demographic analysis, commonly used in contemporary literature on audience development for performing arts organizations (Baumal et al, 1966, DiMaggio et al, 1978, Throsby et al, 1979, Bradley et al, 1979, I, etc.). In addition the study intends to provide a degree of scientific utility for further research in the area. Hence, special heed was paid to the maintenance of two criteria of scientific quality: internal and external validity. The former being referred to as the extent to which one is able to eliminate alternative explanations as causes. The latter being referred to as the extent to which one can extrapolate the findings to larger populations.

Using the guidelines outlined in DiMaggio et al (1978) the personnel involved in administering the survey was carefully trained, the questionnaire itself pretested and results statistically analyzed to maximize their internal validity. An analysis of the overall university population served as a yardstick for the external validity of the survey data.

A three member MBA student team, after composing the questionnaire and consulting with one of the faculty members in the department of marketing, as well as the artistic director of the Phoenix theatre, established the game-plan for procurement of replies. It was as follows:

- 1) Use the Gateway, a University newspaper as a medium for distributing the survey.
- 2) Establish polling stations in the high traffic areas throughout the University campus. The number of stations was contingent upon the volunteers available for the survey. Five polling stations were chosen on this basis:
 - a) Students' Union Building (SUB)
 - b) HUB Mall (University Shopping Mall)
 - c) Central Academic Building (CAB)
 - d) Fine Arts Building
 - e) Mechanical Engineering Building
- 3) Minimize the effect of limited Gateway readership by:

- a) Conducting random class visits. During these visits the surveys were distributed only among individuals who specifically requested to fill out the questionnaires. The visits were conducted by the three members of the organizing group.
 - b) Having additional copies of the survey available at the polling stations, so that individuals who were passing by could fill out the questionnaires.
- 4) Establish a time period for reply collection. It was based on the following considerations:
- a) Replies should be collected on the day following the publication of the questionnaire in order to allow sufficient time to fill it out.
 - b) The collection period should be long enough to allow for differences in class schedules. It had to be limited to six hours, however, due to the limitations in available manpower. It also had to be planned for the period of the most number of scheduled classes. A six hour period commencing at 10 A.M. was selected based on the above criteria.
- 5) Conduct a pretest session for the questionnaire. The pretest session identified the following:

- a) The word "brochure" was a less known term than the word "flyer". Consequently, it was decided to omit the former and include the latter as one of the advertising vehicles.
 - b) "Movies" were not within the ambit of the question on popularity of different entertainment options for \$10 due to their significantly lower price. To avoid confusion, they were totally eliminated from the list of available options.
 - c) In questions requiring evaluation of importance of different factors in absolute terms Lickert scale was used instead of relative rankings.
- 6) Conduct a training session for the survey staff.

It was advised to:

- a) Avoid soliciting any replies from the public.
It was viewed that voluntary submission of completed questionnaires would enhance the credibility of the final results. That is because it was presumed that no individual would voluntarily spend time on something he/she is not interested in.
- b) Explain the meaning of the questions so there would be no misunderstanding on the part of the respondents.
- c) Be in specified locations at specified times during the collection period.

7) Establish an incentive system to enhance the rate of response. It was arranged with the artistic director of the Phoenix to make 10 free season subscriptions available for a draw. Each individual who filled out a questionnaire became eligible for the draw. This strategy was implemented by registering respondents' names on separate sheets. No names were recorded on the questionnaires. A close examination of the compiled lists was made to check for double-entries.

THE SAMPLE

Book and Globerman (1975) argued that examination of the total market of theatre attenders and non-attenders provides an insight into understanding of not only current theatre audiences, but rather the current and the potential theatre patrons. This approach examines "whether the structure of ticket prices and other costs prevent some people from attending at all"⁽¹⁶⁾. Unfortunately, most of the examined studies limited themselves only to theatre attending audiences (Bradley, et al, 1979, I, II, DiMaggio et al, 1978, Baumol et al, 1966, etc.).

This study purported to examine the University market in both dimensions. It should be viewed as a study of current and potential attenders as testified to by its results. Consequently, the marginal bias toward the theatre attending market flagged by Book and Globerman (1975) inherent in this approach should not be viewed as a factor

affecting the internal validity of its results. It can be argued that segmentation of the university market into attenders and non-attenders of live theatre would not only distort the applicability of results of a study of this nature, but would rather misguide theatre managers in their pursuit for audience development. This survey was composed on the premise of the university market being divided into three groups:

- 1) Attenders of live theatre - people who attend live theatre at least once a year.
- 2) Potential attenders of live theatre - people who currently don't attend for some reason (e.g. high cost in terms of time and money) but are interested and willing to attend.
- 3) Committed non-attenders of live theatre - people who have absolutely no interest in attending and probably will not attend in the future.

This survey was not intended to concern itself with the third category of the University population. Therefore, it was deliberately intended not to solicit replies, but rather to let respondents find their own way to the polling station or specifically request questionnaire forms in the case of class visits. In addition, the survey did not purport to provide quantitative answers about the quantity of theatre attenders or potential attenders in the University population. The survey was designed to provide statistically sound answers to questions of effective

marketing for this segment, e.g. establishing taste preferences and constraints existing in the university environment toward live theatre.

For the purposes of this study attenders of live theatre were divided into two parts: frequent attenders and infrequent attenders. Frequent attenders are defined here as individuals who attend live theatre four or more times a year. This is obviously less than that defined by Bradley (1979) who assumed frequent attenders to be individuals who attend live theatre four or more times during a two-month period. It is also less than that defined by Padfield (1980), who set the frequency of minimum attendance for this category at 10 per year. The difference between this and the above studies lies in the fact that the latter took the whole spectrum of the population rather than only the student portion, which has inherently lower attendance rate as indicated in Table III-1.

This table demonstrates, that while students constituted 21% of the theatre non-going public, they formed 19% of the infrequent attenders who come to live theatre only 1 to 3 times a year, and only 12% of the public attending live theatre 4 or more times a year. This designation adequately subdivides the market into categories by attenders: non-attenders, infrequent attenders and frequent attenders.

Table III-1

Frequency of Attendance of Live Theatre
Related to Type of Occupation

<u>Occupation</u>	<u>% of Total</u>		
	<u>None</u>	<u>1-3 Times a Year</u>	<u>4 or More Times a Year</u>
Student	21	19	12
Housewife	15	18	20
Professional	29	31	37
Executive/Managerial	11	13	15
Non-professional	21	16	12
Retired	2	2	3
Other	1	1	1
Total	100	100	100

Source: Book, S.H., Globerman, S. The Audience for the Performing Arts: A Study of the Attendance Patterns in Ontario. Toronto: Ontario Arts Council, 1975, p.69.

Therefore, for the purposes of this study we define attendance frequency as a claimed normal yearly attendance of live theatre. Infrequent attenders attend live theatre from 1 to 3 times a year. The remaining portion of the respondents are non-attenders.

To summarize, the population of respondents has been categorized into the following segments:

Frequent Attenders attend 4 or more times a year.

Infrequent Attenders attend 1 to 3 times a year.

Non-attenders attend 0 times a year.

The purpose for evaluating desired attendance was three-fold:

- 1) To evaluate potential attendance in relation to the current attendance.

- 2) To test the validity of the argument that non-attenders who voluntarily filled out the questionnaires are in fact potential attenders (frequent or infrequent).
- 3) Desired attendance should serve as a basis for determination of a difference between the two attendances.

THE QUESTIONNAIRE

The actual text of the questionnaire is presented in Appendix A. The current and the potential attendances combined with the reasons for the difference formed the first part (3 questions) of the survey design.

The next part of the survey (question 4) purported to establish an entertainment preference for the value of \$10, and look at the popularity of live theatre in relation to other forms of pastimes. Categorization was as follows:

- 1) Snacks and drinks.
- 2) Sporting events.
- 3) Live theatre.
- 4) Symphony/Opera.
- 5) Other.

It is important to note, that, firstly, again, "movies" were not mentioned in this part as their admission costs are lower than those of live theatre. Secondly, live theatre was only third on the list of entertainment activities. It was viewed that an inherent bias toward live theatre was present in this question due to the fact

that the questionnaire was done for the Phoenix and the contingent of people answering it would exhibit a higher degree of interest toward live theatre. It is rather difficult, however, to measure the effect of "hiding" live theatre in the third position to dampen the bias.

Questions 5-7 concerned themselves with the area of subscription. It was decided to examine theatre subscriber-ship in light of the total subscribership (i.e. symphony, opera, ballet, hockey, etc.) in terms of current and potential populations. The purpose for this approach was two-fold.

- 1) To examine the current live theatre subscription rate in relation to other events (static indicator).
- 2) To evaluate the dynamics of this relationship in terms of possible changes in this relationship (dynamic indicator).

Examination of the importance of different reasons for buying a theatre subscription followed its static and dynamic indicators. This examination was carried out across the following dimensions:

- 1) Ticket availability.
- 2) Convenience.
- 3) Price Incentive.
- 4) Seating Advantage.
- 5) Continuation of last year's subscription.
- 6) Season content.
- 7) Other.

The Likert scale was employed to evaluate the importance of these factors. It was viewed that ranking may distort the validity of the outcome (e.g. some factors can be of equal importance, the difference between them may not accurately represent the real importance or unimportance of each factor, etc.)

The next part of the questionnaire (question 8) concerned itself with establishing the importance of different reasons for attending a play. A list of 12 items used in the study of Book and Globerman (1975), has been compressed to reflect characteristics pertinent to the university population. The categories were as follows:

- 1) Content of a play.
- 2) Star(s).
- 3) Special effects.
- 4) Author.
- 5) Theatre location.
- 6) Ticket price.
- 7) Other.

It was felt that results obtained from this section of the survey would provide valuable information for theatre promotion in the University environment. Ranking of the above categories was felt to be potentially more informative, as, ultimately, the emphasis was placed on the prime choices of the respondents.

The establishment of preferences for play type and origin was also considered to be imperative for launching

an effective marketing campaign among the university population (questions 9A and 9B). The play type categories were as follows:

- 1) Serious drama.
- 2) Comedy.
- 3) Fantasy
- 4) Musical
- 5) Mystery.
- 6) Other.

This categorization was viewed to cover a full range of theatrical genres. The above breakdown differed from that of Heitmann and Crocken (1976), who divided play types into:

- Musical.
- Comedy.
- Contemporary drama.
- Serious drama.

In the pretesting phase it was found that Heitmann and Crocken's structure could cause confusion between serious and contemporary dramas (contemporary drama can also be serious) and the addition of fantasy and mystery should complete the picture.

The resolution of the importance of play origin was viewed to be instrumental in establishing repertoire preferences for live theatre attendance. For example, a positive market attitude toward Canadian content would indicate what degree of balance exists between the

Government's preference for a higher proportion of Canadian plays, and the satisfaction of consumers' tastes. Five categories were identified:

- 1) Canadian.
- 2) American.
- 3) British.
- 4) Other European.
- 5) Other.

The fourth category was also suggested in the pretest stage to get a better understanding of the popularity of plays from European countries other than Britain. With the increasing number of European immigrants this information may represent an excellent opportunity for audience development.

Much attention has been devoted in past research to the notion of attendance preferences as a function of the night/day of the week and price. Five categories were offered for this study (question 10). They represented a typical price breakdown dominant in Edmonton

Respondents were asked to rank their preferences on the following:

- 1) Weeknight for \$7.
- 2) Weekday matinee for \$4.
- 3) Weekend night for \$9.
- 4) Weekend matinee for \$5.
- 5) Opening night with reception for \$12.

Two factors are present in this categorization - time and price. With the performance schedule being relatively fixed (no performances on Monday, performances all other nights, Sunday matinee, etc.) any excess demand can be manipulated by adjusting the admission price or in the case of university population, by scheduling the availability of student discounts. Hence, the above categorization was viewed to be adequate to provide enough information on coordination of balanced attendance throughout the week.

Questions 11 and 12 examined the effects of advertising media on attendance of live theatre. It was divided into two parts:

- 1) Popularity of different media of advertising.
- 2) Effect of theatre reviews on theatre attendance.

A maximum amount of choice was offered to the respondents. Ten sources of advertising media were requested to be ranked with respect to their popularity:

- 1) The Edmonton Journal Newspaper.
- 2) The Edmonton Sun Newspaper.
- 3) Billboards.
- 4) Flyers (Brochures).
- 5) The Gateway (University Newspaper).
- 6) Radio/TV.
- 7) "The Nightlife" Poster.
- 8) SUB Calendar (describing mainly events occurring in the Students' Union Building theatre).
- 9) Word of Mouth.

10) Other.

Padfield (1980) examined media effectiveness in his survey of Edmonton audiences. This model, however, was a consolidated version of the model employed here. The difference can be attributed to the fact that this survey was limited to the university population and a more in-depth analysis was required (i.e. newspaper breakdown, billboards vs. posters, etc.) for better understanding of the market segment under study.

Padfield (1980) studied the effects of theatre reviews on theatre attendance. He employed a three-dimensional categorization in his evaluation:

- 1) Attendance is always affected by theatre review.
- 2) Attendance is sometimes affected by theatre review.
- 3) Attendance is never affected by theatre review.

With a high proportion of the student population being single ticket buyers, as suggested by Book and Globerman (1975) and Padfield (1980), with Newman's (1977) suggestion of single ticket buyers being affected by theatre reviews, it was important to further analyze this issue as applied to the student population. Consequently, respondents of this survey were requested to evaluate the weight attributed to theatre reviews in their decision to attend, on a scale of 1 to 5, with 5 being very important.

Evaluation of students' purchasing habits was felt to be important in assessing the means for attracting this group to live theatre performances. Padfield's (1980)

segmentation of selling outlets was compressed into more generalized categories (question 13):

- 1) In advance.
- 2) At the door.
- 3) By subscription.
- 4) Other.

It should be noted that the "other" category was employed to give respondents an opportunity to identify items missing on the choice list. In case of omission respondents were able to include their own preferences. Repeatability of unsolicited information served as a signal for popularity or preferences for a number of items.

Questions 14-19 were allocated for examination of consumer knowledge of the Phoenix and its competitor, the Citadel. Results of this portion of the survey fall beyond the scope of issues intended to be discussed in this study.

It should be noted that due to the space limitations only two background characteristics of the respondents were solicited: faculty and age (questions 20 and 21). The former was of interest to establish an effective advertising strategy, as it would indicate which faculties are generally more interested in live theatre. With a limited promotional budget, this information would be very important as live theatre advertising would be focused on the areas with the lowest concentration of committed non-attenders.

The age characteristic was considered important as it would assist in relating the age distribution of the sample to that of the overall population. It was viewed that no other characteristic would be of the same value. It is important, however, to analyze the gender of the respondents and correlate it with past research. This aspect was not investigated by this study.

It should also be stated that the class visits were organized in such fashion that students in buildings with no polling stations in them would be able to submit their replies without trying to walk across the campus. The classes themselves within these buildings were selected at random. This approach was intended to assist in obtaining a more adequate distribution of questionnaires and their collection.

ANALYSIS OF RESULTS

Analysis of results were divided into three parts:

- I) Analysis of frequencies.
- II) Analysis of subsequent groupings.
- III) Statistical analysis.

Analysis of Frequencies

The survey data were collected and coded according to the categorization structure described above. All results were examined in terms of relative frequencies (relative

frequencies are defined here as the distribution of the number of replies over the whole spectrum of outlined categories for each question). Zero replies are not included, except for the current and potential attendance numbers.

Analysis of Subsequent Groupings

Several subgroupings were identified in the total population of the respondents. These were:

- Theatre attenders.
- Theatre subscribers.
- Respondents in the age category of under 20.
- Respondents in the age category of 20-25.
- Respondents in the age category of 26-40.
- Respondents in the age category of over 40.

An analysis of the interrelationship between the above groups was conducted in addition to compiling response summaries for each of the above groups as related to media effectiveness, purchasing habits, potential subscribership, the importance of different factors for buying theatre subscriptions, attitudes toward play types and ticket prices. The matching combinations were established on the basis of providing maximum utility for establishing an effective policy strategy for audience development among the university population.

Statistical Analysis

Statistical analysis of the obtained data was done in the following manner.

- 1) The applicability of Student's distribution to the resultant ranking of different entries (e.g. The Journal popularity, popularity of Canadian plays, popularity of play content as a reason for attending, etc.) was assessed.
- 2) Cross-tabulation analysis yielded a possibility of dependence/independence of various characteristics under study. χ^2 test of independence was employed to determine these relationships.
- 3) A comparison of the actual and sampled populations was done by applying a normal distribution test.

The Applicability of the Student's t-Test

The applicability of the Student's t-test was examined to be able to make inferences about the attitudes of the total university population from the sample of survey respondents. It was found that the Student's test was limited in its applicability to the validity of the obtained results, because of the following reasons:

- a) The distance between different rankings was not known. Therefore, by compiling information on the delta ranking of each response for two different entries over the whole sample of responses it was not possible to adequately assess the difference. For example, if The Journal were ranked as "2" and the Sun as "4" on one response and on the other response they were ranked as "1" and "3", respectively, the difference in both cases should be "2". We

would not know, however, whether the difference in perceptions in both cases was the same. Furthermore, it would be difficult to determine whether the "4" ranking for the Sun on one response form would be significantly or insignificantly different from the "3" ranking on the other. These deficiencies in qualitative assessments could not yield statistically satisfactory results.

- b) In assessing comparative rankings it was difficult to assign ranks to entries that were not ranked at all. In the above example of two newspapers, if in a single response The Journal had a ranking and The Sun didn't, it was difficult to quantify the actual difference in popularity between the two media sources. The assignment of a ranking next to the least popular source could misrepresent the actual unpopularity of the advertising medium with no allocated ranking. This complication could ultimately result in misinformation and, hence, future ineffective audience development practices.

Based on the above arguments it was decided not to consider the Student's test for establishing statistical validity of the obtained array of rankings.

Cross-Tabulation and Independence Tests

To eliminate the problem of relative rankings it was decided to consider prime choices for different entries in analyzing the final data.

This approach had the following advantages:

- a) It clearly indicated the most popular choice among many.
- b) It was not necessary to consider the relative degrees of popularity between choices.
- c) Entries with unassigned popularity rankings did not have to be included with the assumed rankings.

Consequently, assuming the highest degree of popularity of different entries on the grounds of them being ranked #1, it was possible to establish:

- a) The most popular entries.
- b) Analyze their popularity as a function of other factors.

The latter could be achieved through cross-tabulation (cross-tabs). Cross-tabs involved the evaluation of the popularity of different entries as related to different subpopulation groups. For example, based on the prime choices (read: top rankings), it was possible to examine the popularity of different advertising media for frequent and infrequent theatre attenders, differences in ticket buying habits for different age categories, play type preferences for theatre subscribers and non-subscribers and so on. Dependencies between these categories had to be assessed to establish the necessary market information, allocation of target group(s) and effective theatre marketing for audience development. χ^2 distribution was used to analyze this dependency. A number of tests were

conducted to accept (or reject) the null-hypothesis (H_0) of independence between entries (i.e. attendance and advertising media, subscription population and age distribution, etc.). Naturally, rejection of H_0 implied validity for the alternative hypothesis (H_a) to that of independence.

Actual vs. Sampled Age Distribution

Age distribution was the only information available about the university population as a whole. The comparison of age distributions was intended to explain variations in interest toward live theatre among different age groups in the university community. Fractions of each age category were analyzed to prove H_0 , that fractions of sample populations for different age brackets were similar to those of the total university population. The alternative hypothesis meant otherwise. It was legitimate to assume normal distribution for the population size of the survey and the critical value for Z_0 was evaluated at the 95% confidence level at 1.96 ($\alpha = 0.025$ for a two-sided case).

Similar analysis could not be conducted on the faculty distribution due to the fact that the polling stations were not uniformly distributed across the campus but were rather located in high traffic areas.

QUALITY OF RESULTS

Only those replies that met the standard of accuracy were considered. The criteria were as follows:

- 1) Replies to at least 25% of the questions were accepted.
- 2) Replies that were merely scrawled upon for the purposes of a joke or prank were rejected.

CHAPTER IV
ANALYSIS OF RESULTS

SCOPE

As a result of the survey 395 questionnaires were collected, 23% of which came from the class visits. Nineteen questionnaires were discarded as unacceptable by the standards of the study. The analysis of the survey was conducted, as it was indicated in the previous section, along the following dimensions:

- 1) Analysis of frequencies.
- 2) Analysis of subsequent groupings.
- 3) Statistical analysis.

Tables 1-12 cover the first dimension; tables 13-25 cover part of the second dimension, representing a summarized version of selected rankings; tables IV-2 to 22 cover the second part of the same dimension. They represent a cross-tabulation analysis for a variety of variables. It should be noted that only prime choices of the respondents were considered in this analysis as indicated in the Methodology section. Tables 26 and 27 present two types of statistical analysis conducted for this study as the third dimension. The data presented in Table 48 summarize results of the χ^2 tests of independence conducted on the basis of the cross-tabs.

The presentation of the final results, however, was approached from the standpoint of thematic analysis. This analysis covered the following areas for the

university market:

- 1) Current and potential attendance of live theatre.
- 2) Popularity of live theatre compared to other forms of entertainment.
- 3) Current and potential subscribership to live theatre.
- 4) Reasons for attending live theatre.
- 5) Play preference by type and origin.
- 6) Ticket preference as related to days of the week and price.
- 7) Effectiveness of different sources of advertisement.
- 8) Effects of theatre reviews on theatre attendance.
- 9) Preferred ways of buying theatre tickets.
- 10) Distribution of respondents by area of study and age.

It should be noted that validity tests were conducted to evaluate the accuracy of data processing. For example, one would presuppose that subscribers get their tickets mainly through subscriptions. Evidence to the contrary could signal some pitfalls in handling the data. It was discovered discovered that subscription was indeed the most preferred way of buying theatre tickets for theatre subscribers which served as a reassurance for accuracy in processing the data.

The study, however, did have some limitations that should be recognized before results are presented. Firstly, the questionnaire was distributed through the university

newspaper, which implies that the distribution to the questionnaire was mostly limited to its readership.

Secondly, only five polling stations were set up due to the limitations in manpower. While placed in high traffic areas they did not encompass the whole area of the campus. This arrangement precluded some faculties from a more active participation. Thirdly, due to the same limitation in manpower, the collection period was scheduled only for six hours on a particular day. While sufficient to provide a snapshot of the needs and preferences of the student population, it did limit it to the group attending the university on that particular day. And lastly, due to space limitations of the newspaper page few issues like respondents' gender, were omitted. Therefore, future research is needed to investigate the issues missing in this study.

CURRENT AND POTENTIAL ATTENDANCE FOR LIVE THEATRE

About half of the respondents could be classified as frequent attenders who currently attend live theatre four or more times a year (see Methodology for the rationale behind this definition) as indicated in Table 1. The desired attendance, however, was higher than the current one, as shown in the table. In fact, only four respondents indicated that they did not want to attend live theatre. Consequently, this result confirms the previous argument (see Methodology) that committed non-attenders were virtually absent from amongst the respondents.

Hence, based on the composition of the population of the respondents, the results of the survey can offer an important insight into the difference between attitudes and preferences of the current and potential attenders. These data should have very little (about 1% based on the fact that 4 out of 376 respondents were committed non-attenders) noise on what should be done to move the desired attenders (or potential attenders) into the category of attenders. The most frequently stated reasons for the difference between actual and desired attendance (Table 1) were "no money" and "no time", which concurs with Baumol and Bowen (1966). It should be noted that the number of responses, as shown in Table 1, for this part, exceeds 376, due to the fact that the top two reasons (where possible) were recorded for data processing. It should also be borne in mind that the current and the desired attendances do not represent the university market potential in absolute terms. The survey rather shows the relative trend between these categories.

POPULARITY OF LIVE THEATRE COMPARED TO OTHER FORMS OF ENTERTAINMENT

Live theatre compares favourably with other forms of entertainment for a similar value of about \$10 (Table 2). In fact, the results of the survey show 114 out of 370 respondents ranked it as number one on the popularity list. It should be realized, however, that movies were highly ranked despite the fact that the evaluation of their

preference was not solicited (cinema admission charge is lower than that of live theatre). It should be noted that some bias toward live theatre was present, due to the nature of the survey associated with the fact that it was done for live theatre.

CURRENT AND POTENTIAL SUBSCRIBERSHIP TO LIVE THEATRE

Table 3 indicates that although there were 94 subscriptions owned by the respondents (as opposed to the number of respondents with subscriptions which was somewhat less) the number of desired subscriptions was almost 75% higher (164). This number represents the number of subscriptions desired over and above the ones currently owned.

Compared to other events, live theatre shows the highest potential for additional subscribership, which again can be somewhat attributed to the fact that almost all the respondents were interested in live theatre. The results do indicate, however, that the current student subscribership is far from saturated.

The analysis of intersubscribership shows that 44% of the total number of respondents who subscribe to classical music events (i.e. opera, symphony, chamber music) also subscribe to live theatre (Table IV-1) which concurs with observations made by Anderson and Belk (1980), who found that a positive correlation existed between symphony and live theatre attendance.

Table IV-1

Subscribership to Live Theatre as
Related to Subscribership to
Classical Music Events and
Movie Theatre Memberships**

	<u>Subscribership To Classical Music Events*</u>	<u>Movie Theatre Membership</u>
Total	39	52
Live Theatre Subscribers	17	13
† Live Theatre Subscribers	44	25

* Classical music events include symphony, opera, ballet, chamber music society.

** Based on the number of respondents and not on the number of subscriptions, which will be somewhat higher.

The proportion of live theatre subscribers was lower (25%) in the total population of movie theatre members. These results suggest that live theatres can draw higher audiences from the population of classical music subscribers and to a lesser extent movie theatre members.

It is also important to note that out of 140 respondents who desired to buy additional subscription(s), 26 were current subscribers (Table 20). In addition, a great number of respondents who wanted to buy more than one additional subscription were not even current subscribers (114 out of 140 potential subscribers, as per Tables 20 and IV-2. It was also found that 78 out of 140 potential subscribers were frequent attenders (56%), while only 108 out of 236 potential non-subscribers were frequent attenders (46%). The

TABLE IV-2
 DISTRIBUTION OF POTENTIAL SUBSCRIBERS
 AMONG FREQUENT AND INFREQUENT THEATRE
 ATTENDERS

Number of Responses/% of Total Responses

	1 Frequent Attenders	2 Infrequent Attenders	Total
I Potential Subscribers	<u>78 / 41.9</u>	<u>62 / 32.6</u>	<u>140 / 37.2</u>
II Potential Non-Subscribers	<u>108 / 58.1</u>	<u>128 / 67.4</u>	<u>236 / 62.8</u>
Total	186 / 100.0	190 / 100.0	376 / 100.0

independence test conducted on this basis rejected the H_0 at the 90% level (Table 27, Test 31).

It was not surprising to find that 70 out of 79 current subscribers were frequent attenders (Table IV-3), and over 95% of infrequent attenders were non-subscribers. The χ^2 test of independence between subscribership and attendance was rejected at the 95% confidence level (Table 27, Test 30), which indicates that attendance does depend on the subscribership and vice versa. The latter observation does concur with the dynamic theory of subscription, outlined by Ryans and Weinberg (1978), as described in Conceptual Analysis.

The age distribution of theatre subscribers and non-subscribers is presented in Table IV-4. This distribution confirms Newman's (1977) and Ryans and Weinberg's (1978) conclusions with regard to age/subscribership relationship. While the fractions of subscribers of the two youngest groups amounted to meagre 16% and 19%, respectively, those for the older two groups constituted 31% and 33%. The independence test for this matrix rejected H_0 at the 95% level (Table 27, Test 26).

Table 4 shows the importance of different reasons for buying season subscriptions. The majority of the respondents ranked season content as most important (121 respondents rated it as 5 and only 29 rated it as 1 on the 1 to 5 scale with 5 being very important). Continuation of last year's subscription was rated as important. This result

TABLE IV-3

DISTRIBUTION OF LIVE THEATRE SUBSCRIBERS
AMONG FREQUENT LIVE THEATRE ATTENDERS

Number of Responses/% of Total Responses

	<u>1</u> Frequent Attenders	<u>2</u> Infrequent Attenders	Total
I Subscribers	70 / 37.6	9 / 4.7	79 / 21.0
II Non-Subscribers	116 / 62.4	181 / 95.3	297 / 79.0
Total	186 / 100.0	190 / 100.0	376 / 100.0

Note: χ^2 independence test rejected at 95%.

TABLE IV-4
DISTRIBUTION OF LIVE THEATRE SUBSCRIBERS
BY AGE

	Number of Responses/% of Total Responses				
	I <u><20</u>	II <u>20-25</u>	III <u>26-40</u>	IV <u>>40</u>	<u>Total</u>
1. Subscribers	14/16.5	42/19.1	17/30.9	6/40.0	79/21.1
2. Non-Subscribers	<u>71/83.5</u>	<u>178/80.9</u>	<u>38/69.1</u>	<u>9/60.0</u>	<u>296/78.9</u>
Total	85/100.0	220/ 100.0	55/ 100.0	15/ 100.0	375/100.0

Note: χ^2 independence test rejected at 95%.

contradicts Newman's (1977) contention that resubscribers should and do represent a high proportion of theatre audiences in successful organizations. The difference can be perhaps attributed to the fact that students represent a relatively small portion of the public attending theatre by subscription. Consequently, before resubscribing or subscribing for the first time, they examine or carefully reexamine the following season before committing funds that are usually scarce. The lower weight was also placed upon the continuation of last year's subscription by current classical music and live theatre subscribers (Table 21). Season content was still ranked highest (most important).

To summarize, the population of theatre subscribers was found to be mostly comprised of frequent theatre attenders. A high degree of intersubscribership existed between classical music events and live theatre, while that between movie theatres and live theatres was not as prevalent.

A great number of current non-subscribers wanted to become subscribers. In addition, there was a higher proportion of theatre subscribers among older age categories than younger categories. The majority of the respondents viewed the continuation of last year's subscription as the least important reason for subscribing to the current season, while season content was viewed as the most important.

REASONS FOR ATTENDING LIVE THEATRE

Table 5 summarizes the overall ranking of different reasons for attending live theatre. It shows that play content was chosen to be the most important reason for attending by the great majority of the respondents, while special effects were ranked the lowest. It was rather unexpected to see that only 25 respondents ranked ticket price as the most important reason for attending, especially in light of the fact that "no money" was listed as the major reason for limited attendance (Table 1). This result was perhaps due to the fact that when the decision to see a preferred play is made, price considerations become secondary. In fact, considering the first two rankings as an indicator of a driving force for attending live theatre, reasons such as star(s) and author(s) came before price.

This analysis includes both frequent and infrequent attenders, which may not be indicative of the feelings of the theatre-going portion of the university population. Table 25 represents the attitudes of frequent theatre patrons toward the ticket price. The importance of this table lies in its ability to indicate whether the price considerations are essential for individuals who attend live theatre four and more times a year. Only 6.5% of the total number of frequent theatre attenders indicated that it was the most important factor in their attending live theatre performances; in fact, the most popular ranking for the importance of ticket price was 3 (48%). The prime

attraction to live theatre as viewed by this group was play content (Table IV-5), as indicated by 149 out of the total of 185 replies for this group. Price was the third consideration after author, which was second. The infrequent attenders also indicated that play content was the most important consideration for attending live theatre; it was followed, however, by ticket price and theatre location. In general, though, deviations in the distributions of popularity of different reasons for attending live theatres for these two groups were not significant as testified by the χ^2 test (Table 27, Test 32). The null-hypothesis of independence between attendance and reasons for attending was accepted with the 95% confidence. In fact, all the tests of independence between different combinations in Table IV-5, except one, yielded acceptance of the null-hypothesis (Table 27, Tests 32-38). The independence test between the importance of special effects and author of a play as related to the frequency of attendance was rejected (Table 27, Test 37).

Play content was also chosen to be the most popular reason for attending live theatre performances among both subscribers and non-subscribers (Table IV-6). Other factors were uniformly secondary which caused the acceptance of the independence test between these two variables as shown in Table 27, Test 52.

To summarize, play content was found to be the most important reason for attending live theatre for all groups

TABLE IV-5

DISTRIBUTION OF ATTRACTIONS TO LIVE THEATRE AMONG FREQUENT AND INFREQUENT THEATRE ATTENDERS

Number of Responses/% of Total Responses

	¹ Content	² Star Effects	³ Special Effects	⁴ Author	⁵ Theatre Location	⁶ Ticket Price	⁷ Total
I Frequent Attenders	149/49.7	5/35.7	1/14.3	13/59.1	6/37.5	11/44.0	185/49.2
II Infrequent Attenders	151/50.3	9/64.3	6/85.7	9/40.9	10/62.5	14/56.0	199/50.8
Total	300/100.0	14/100.0	7/100.0	22/100.0	16/100.0	25/100.0	376/100.0

Note: χ^2 independence test rejected at 95% between variables 3, 4 and I, II.

TABLE IV-6

DISTRIBUTION OF PRIME REASONS FOR ATTENDING AMONG LIVE THEATRE SUBSCRIBERS
AND NON-SUBSCRIBERS

Number of Responses/% of Total Responses						
	1 Play Content	2 Star(s)	3 Special Effects	4 Author	5 Theatre Location	6 Ticket Price
I Subscribers	64/21.3	3/21.4	-/00.0	3/15.8	5/31.2	3/12.0
II Non-Subscribers	236/78.7	11/78.6	7/100.0	19/84.2	11/68.8	22/88.0
Total	300/100.0	14/100.0	7/100.0	22/100.0	16/100.0	25/100.0
						384/100.0

of respondents. The ticket price was not even close to play content in its significance.

PLAY PREFERENCE BY TYPE AND ORIGIN

The overall play preferences by type and origin are shown in Table 6. Most of the respondents preferred comedy and serious drama (in this order) to other theatrical genres. While about the same number of respondents indicated the most preferred (#1) choice for serious drama and comedy (130 and 139, respectively), 122 respondents elected to choose comedy as their second choice to 68 for serious drama. The musical was third on the list of popularity with 59 entries in each of the top two categories. The other two types of play, mystery and fantasy were the least popular.

The above relationship did not uniformly hold, however, for all age groups. Table 22 shows that only 35 out of 75 respondents or 47% of the under 20 years of age population placed serious drama as one of their two prime choices, whereas for the 26 to 40 group, these numbers were 34 out of 49 respondents or 69%, and for the over 40 group, 9 out of 13, or the same 69%. Table 23 is almost a mirror image of Table 22. It shows that 61 out of 74 or 82% of the respondents in the under 20 age bracket placed comedy in the first two categories of most preferred play types, whereas for the 26 to 40 group, these numbers were 32 out of 50 or 64%.

Table 24 shows that serious drama was more popular than comedy for frequent attenders. In fact, a test of independence #22 (Table 27), based on the cross-tab in Table IV-7, was rejected with 95% confidence indicating that for the first three age groups the prime preference for a play type was a function of age. For example, if 21 and 34 individuals under 20 years of age indicated their preference for drama and comedy, respectively, individuals between 20 and 25 split 81-86, and those between 26 and 40 divided 23-15, with 23 favouring serious drama and 16 favouring comedy. Naturally, other categories also contributed to the rejection of the test. For example, 18 out of 81 respondents (22%) under 20 years of age preferred the musical type of play; for the 20 to 25 age group the number was 15%, and for the 26 to 40 group - 10%. As indicated in Table 26, 81% of the university population is under 25. Therefore, it would be valid to conclude that university students do prefer lighter forms of entertainment. If we combine comedy and musical into one group of lighter entertainment we would find that it was preferred by the 64% of the under 20 group, 55% of the 20-25 group, and 38% of the 26-40 group, a less representative group of student population. This result coincides with Heitmann and Crocken's (1976) observations, when they concluded that "as a group, students seem to have a marked preference for light entertainment and a minimum amount of critical perceptiveness. This preference for entertainment rather

TABLE IV-7
DISTRIBUTION OF PRIME CHOICES FOR PLAY
TYPES BY AGE

<u>Play Type/Age</u>	Number of Responses/% of Total Responses				<u>Total</u>
	<u>I</u> <u><20</u>	<u>II</u> <u>20-25</u>	<u>III</u> <u>26-40</u>	<u>IV</u> <u>>40</u>	
1. Drama	21/25.9	81/38.0	23/44.2	6/33.3	131/36.0
2. Comedy	34/42.0	86/40.4	15/28.9	4/22.2	139/38.2
3. Fantasy	3/3.7	4/1.9	5/9.6	1/5.6	13/3.6
4. Musical	18/22.2	31/14.6	5/9.6	5/27.8	59/16.2
5. Mystery	5/6.2	11/5.1	4/7.7	2/11.1	22/6.0
Total	81/100.0	213/100.0	52/100.0	18/100.0	364/100.0

Note: χ^2 independence test rejected at 95% for variables:

1 - 5 and II, III
1 - 5 and I, III.

than intellectual or emotional challenge is, however, generally shared. The most significant modifying factor would seem to be age, and it is interesting to note that those with the most pronounced taste for the serious drama fall in the mid-career stage of life".⁽¹⁷⁾ A change in attitudes toward different types of plays was observed not only across the range of different age groups. Table IV-8 demonstrates that while a higher fraction of individuals who preferred to see dramatic plays came from frequent attenders, the majority of comedy lovers came from infrequent attenders. It was also apparent that musicals were more popular among infrequent attenders. These differences in tastes between frequent and infrequent attenders were found significant at the 95% level of confidence as shown in Table 27 (Tests 39-42). But the majority of theatre subscribers were also frequent attenders (Table IV-3). Hence, the difference in attitudes between subscribers and non-subscribers toward play types could be expected. As shown in Table IV-9, the drama fans constituted the highest proportion of the subscribership (52%), while the majority of non-subscribers preferred comedy (41%). These differences in attitudes toward play types between subscribers and non-subscribers were found to be significant (Table 27, Tests 53-56) at the 95% level of confidence.

Turning to the respondents' attitudes toward play origin (Table 6), it was found that the majority of individuals who replied to the questions of the survey

TABLE IV-8

DISTRIBUTION OF PLAY TYPE PREFERENCES AMONG FREQUENT AND INFREQUENT THEATRE ATTENDERS

Number of Responses/% of Total Responses						
	1 Drama	2 Comedy	3 Fantasy	4 Musical	5 Mystery	Total
I Frequent Attenders	79/60.8	58/41.7	8/61.5	23/39.0	10/43.5	178/48.9
II Infrequent Attenders	51/39.2	81/58.3	5/38.5	36/61.0	13/56.5	186/51.1
Total	130/100.0	139/100.0	13/100.0	59/100.0	23/100.0	364/100.0

Note: χ^2 independence test rejected at 95% for variables:

1 - 5 and I, II
 1, 2, 4, 5 and I, II
 1, 2, 3 and I, II
 1, 2 and I, II.

TABLE IV-9

DISTRIBUTION OF PLAY TYPE PREFERENCES AMONG LIVE THEATRE SUBSCRIBERS
AND NON-SUBSCRIBERS

Number of Responses/% of Total Responses					
	1 Drama	2 Comedy	3 Fantasy	4 Musical	5 Mystery
I Subscribers	40/30.7	20/14.4	2/15.4	11/18.6	4/17.4
II Non-Subscribers	90/69.3	119/85.6	11/84.6	48/81.4	19/82.6
Total	130/100.0	139/100.0	13/100.0	59/100.0	23/100.0

Note: χ^2 independence test rejected at 95% for variables:

1 - 5 and I, II
1, 2, 4 and I, III
1, 2, 3, 4 and I, II
1, 2 and I, II

wanted to see more Canadian content in theatre repertoires. In addition, British plays were found to be more popular than American. Russian, German and French plays were the most popular in the "other" category. This breakdown of play popularity by origin was quite uniform among all age groups (Table IV-10), and the independence test between play origin preferences and age was accepted at the 95% confidence level (Table 27, Test 24). This was not the case when attitudes of frequent and infrequent attenders toward play origin were analyzed. The independence test based on the data presented in Table IV-11 rejected the H_0 with the 95% confidence (Table 27, Test 43). The distribution of prime choices for Canadian and British plays between these two groups served as a basis for accepting the H_0 , which concludes that Canadian plays were more popular for both groups of attenders (Table 27, Test 46). The popularity of British plays was more prevalent among frequent rather than infrequent attenders. While frequent attenders constituted about 50% of the respondents who preferred British plays, they comprised only 30% of those who preferred to see American plays, which caused the null-hypothesis to be rejected at the 95% confidence level (Table 27, Test 47). Partly because of this relationship, Tests 44 and 45 (Table 27) were also rejected.

The picture was different when attitudes toward plays of different origins for subscribers and non-subscribers were analyzed. This difference can be attributed to the

TABLE IV-10
DISTRIBUTION OF PRIME CHOICES FOR PLAY
ORIGIN vs. AGE

<u>Play Origin/Age</u>	Number of Responses/% of Total Responses				<u>Total</u>
	<u>I</u> <u><20</u>	<u>II</u> <u>20-25</u>	<u>III</u> <u>26-40</u>	<u>IV</u> <u>>40</u>	
1. Canada	24/38.7	75/43.3	18/42.9	7/50.0	124/42.6
2. U.S.A.	16/25.8	33/19.1	10/23.8	2/14.3	61/21.0
3. Britain	19/30.7	52/30.1	11/26.2	4/28.6	86/29.6
4. Other	3/4.8	13/7.5	3/7.1	1/7.1	20/6.8
<u>Total</u>	<u>62/100.0</u>	<u>173/100.0</u>	<u>42/100.0</u>	<u>14/100.0</u>	<u>291/100.0</u>

TABLE IV-11

DISTRIBUTION OF PRIME CHOICES FOR PLAY ORIGIN AMONG FREQUENT AND INFREQUENT LIVE THEATRE ATTENDERS

Number of Responses/% of Total Respondents

	1 Canadian	2 American	3 British	4 Other	Total
I Frequent Attenders	69/55.2	18/29.5	43/50.0	8/40.0	137/46.9
II Infrequent Attenders	56/44.8	43/70.5	44/50.0	12/60.0	155/53.1
Total	125/100.0	61/100.0	86/100.0	20/100.0	292/100.0

Note: χ^2 independence test rejected at 95% for variables:

1 - 4 and I, II
 1 - 3 and I, II
 1, 2 and I, II
 2, 3 and I, II.

fact that the overall response rate to this question as opposed to the question on the play type was lower. Therefore, the attitudes of frequent theatre attenders could not be expected to be similar to those of theatre subscribers. Consequently, it was not surprising to see that the attitudes toward play origin (Table IV-12) were independent of the degree of subscribership. Tests 57-59 in Table 27 shows that the null-hypothesis for χ^2 distribution could be accepted with the 95% confidence, which means that both subscribers and non-subscribers ranked plays in the same order:

- 1) Canadian
- 2) British
- 3) American
- 4) Other.

It is reasonable to say that the lower response rate to this question could be due to spectators' concern over play content (Table 5) regardless of its origin.

Furthermore, in the final analysis, when the time comes to buy theatre tickets, one can argue that the play quality is going to be considered before its origin. The rationale for this argument is four-fold:

- 1) The respondents overwhelmingly indicated that play content is the main driving force for going to live theatre.

- 2) They showed that season content is the most important reason for buying subscriptions.
- 3) The overall interest in the question of play origin was less acute than that of play content.
- 4) The number of high quality Canadian play is much smaller in relation to the world's dramatic heritage.

The last point needs some qualification. It is not believed that the quality of Canadian plays is low. It is rather argued that in absolute terms the quantity of popular Canadian plays is significantly smaller than from more established theatrical schools, like England, France, Russia, etc. Consequently, in terms of audience development in the university environment, the question of season content in terms of quality of the repertoire is still paramount. One cannot, however, overlook the audience's desire to see more national plays performed on Canadian stages.

To summarize, comedy was found to be the most popular, a theatrical genre closely followed by serious drama. The older respondents, the majority of frequent attenders and theatre subscribers, however, preferred serious drama to comedy, whereas the younger population, the majority of infrequent attenders and non-subscribers expressed their preference toward the lighter forms, i.e. comedy and

TABLE IV-12

DISTRIBUTION OF PRIME CHOICES FOR PLAY ORIGIN AMONG LIVE THEATRE SUBSCRIBERS AND NON-SUBSCRIBERS

Number of Responses/% of Total Responses

	¹ Canadian	² American	³ British	⁴ Other	Total
I Subscribers	33/26.4	13/21.3	14/16.3	4/20.0	64/21.9
II Non-subscribers	92/73.6	48/78.7	72/83.7	16/80.0	228/78.1
Total	125/100.0	61/100.0	86/100.0	20/100.0	292/100.0

musical. As for the play origins, Canadian plays were found to be the most popular for the whole population of the respondents, as well as the sub-groups. They were followed by the British and the American plays.

TICKET PREFERENCE AS RELATED TO DAYS OF THE WEEK AND PRICE

Table 7 presents a summary of ticket preferences by day of the week and price. Weekend evening performances were the most popular followed by the weeknights and only then weekend matinees. This result suggests that the "time" factor in students' attendance is very important. Hence, limitations imposed by many arts organizations designed to allocate a single performance per week (usually Sunday matinee) with the available student discounts do nothing but limit the accessibility of live theatre to a large scale of potential patrons. Students preferred higher priced weekend performances to other lower priced performances.

This attitude was common for all age groups of the respondents (Table IV-13), as attested by Table 27 (Test 25). No difference in preferences for the time of theatre attendance was found between frequent and infrequent theatre attenders on one side (Table IV-14), and subscribers and non-subscribers on the other (Table IV-15), which was confirmed by the independence tests 48 and 60 (Table 27).

EFFECTIVENESS OF DIFFERENT SOURCES OF ADVERTISEMENT

The results on the effectiveness of various advertising media sources are presented in Table 8. The most popular

TABLE IV-13

DISTRIBUTION OF PREFERENCES FOR DAYS OF
ATTENDANCE OF LIVE THEATRE

Number of Responses/% of Total Responses

<u>Day/ Age</u>	<u>I</u> ≤ 20	<u>II</u> $20-25$	<u>III</u> $26-40$	<u>IV</u> > 40	<u>Total</u>
1. Weeknight (\$7) 21/24.1	65/29.5	16/29.6	5/35.8		107/28.5
2. Weekday Matinee (\$4) 6/6.9	12/5.5	2/3.7	--/0.0		20/5.3
3. Weekend Evening (\$9) 28/32.2	64/29.1	19/35.2	7/50.0		118/31.5
4. Weekend Matinee (\$5) 20/23.0	54/24.5	10/18.5	1/7.1		85/22.7
5. Opening Night and Reception (\$12) 12/13.8	25/11.4	7/13.0	1/7.1		45/12.0
Total	87/100.0	220/100.0	54/100.0	14/100.0	375/100.0

TABLE IV-14

DISTRIBUTION OF ATTENDANCE DAY PREFERENCE AMONG FREQUENT AND INFREQUENT
LIVE THEATRE ATTENDERS

		Number of Responses/% of Total Responses					
		1 Weeknight (\$7)	2 Weekday Matinee (\$4)	3 Weekend Evening (\$9)	4 Matinee (\$5)	5 Opening Night And Party (\$12)	6 Total 23/51.1
I	Frequent Attenders	51/47.7	10/50.0	67 /56.3	34/40.0	22/48.9	187/49.7
II	Infrequent Attenders	56/52.3	10/50.0	67 /56.3	34/40.0	22/48.9	189/50.3
Total		107/100.0	20/100.0	119/100.0	85 /100.0	45/100.0	376/100.0

TABLE IV-15

DISTRIBUTION OF ATTENDANCE DAY PREFERENCE AMONG LIVE THEATRE SUBSCRIBERS AND NON-SUBSCRIBERS

Number of Responses/% of Total Responses

	Weeknight (\$7)	Weekday Matinee (\$4)	Evening (\$9)	Weekend Matinee (\$5)	Night & Party (\$12)	Total
I Subscribers	20/18.7	5/25.0	25/21.0	19/22.4	9/20.0	78/20.7
II Non-Subscribers	87/81.3	15/75.0	94/79.0	66/77.6	36/80.0	298/79.3
Total	107/100.0	20/100.0	119/100.0	85/100.0	45/100.0	376/100.0

source was found to be The Edmonton Journal, with 158 respondents placing it in the number one position. Word of mouth was next followed by flyers and billboards. These results strongly agree with findings of Bradley et al (1979, II), Padfield (1980), and Book et al (1975), as discussed in the Conceptual Analysis section. The distribution of rankings of the advertising media for the first three age groups is given in Tables 13-16, while that for the populations of theatre subscribers and frequent attenders in Tables 16 and 17. Table IV-16 shows the distribution of prime choices for advertising media by age. Fifteen tests of independence were conducted on the basis of this table (Table 27, Tests 1-15). It was found that the major difference between various advertising media as a function of age lay in the fact that among the two newspapers, The Edmonton Sun appeared relatively more popular among the under 20 group, while no representative of the above 26 group mentioned this newspaper as the prime source of information. Consequently, the null-hypothesis of independence between the newspapers' popularity and age of the respondents was rejected (Table 27, Test 2). In fact, the popularity of the Journal itself was found to be more pronounced with age. It was chosen to be the prime source of information by 30% of the first age group, 40% of the second age group, 45% of the third age group and 75% of the fourth age group. The University sources of advertisement (i.e. The Gateway, SUB Calendar, Billboards)

TABLE IV-16

DISTRIBUTION OF PRIME CHOICES OF ADVERTISING
MEDIA BY AGE

Number of Responses/% of Total Responses

Advert. Media/ Age	<u>I</u> <u><20</u>	<u>II</u> <u>20 - 25</u>	<u>III</u> <u>26-40</u>	<u>IV</u> <u>>40</u>	<u>Total</u>
1. The Journal	32/30.4	89/40.0	25/44.6	12/75.0	158/39.6
2. The Sun	5/4.8	1/0.4	--/0.0	--/0.0	6/1.5
3. Billboards	8/7.6	23/10.4	8 /14.3	--/0.0	39/9.8
4. Flyers	8/7.6	24/10.8	6 /10.7	2/12.5	40/10.0
5. The Gateway	9/8.6	8/3.6	3 /5.4	--/0.0	20/5.0
6. Radio/T.V.	7/6.7	15/6.8	4 /7.1	1 /6.25	27/6.8
7. Nightlife	7/6.7	10/4.5	2 /3.6	--/0.0	19/4.8
8. SUB Calendar	12/11.4	13/5.9	3 /5.4	--/0.0	28/7.0
9. Word of Mouth	17/16.2	39/17.6	5 /8.9	1 /6.25	62/15.5
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	105/100	222 /100	56 /100	16/100	399/100

Note: χ^2 independence test rejected at 95% for variables:

1, 2 and I - III
1 - 9 and I - II.

scored relatively low among younger groups and were insignificant for the over 40 group. In fact, the university newspaper was placed first by only 9% of the under 20 years old respondents, 4% of the 20-25, and 5% of the 26-40 years old respondents with no respondents of over 40 years of age classifying it as the prime source of advertisement. Consequently, the null-hypothesis of independence between the Journal and the Gateway as related to age was rejected at the 90% level. The decline in the Gateway's popularity with age, however, was not sufficient to reject the null-hypothesis at the 95% level of confidence (Table 27, Test 9). The only source of advertising media that exhibited the same behavior as the Journal was the Brochure (Flyers). The percentage of prime choices for this source rose from 8% for the first age group, to 11% for the second and third to 13 for the fourth. It should be noted that due to the lower response rate of the over 40 age group, the majority of independence testing was done on the first three age groups and different combinations of advertising media.

The distribution of popularity of different advertising sources among frequent and infrequent attenders was also relatively uniform, with the Journal being the most popular source, followed by the word of mouth, billboards and flyers (Table IV-17). The independence test between these variables led to the acceptance of the null-hypothesis (Table 27, Test 49). The same result was obtained for the distribution

TABLE IV-17

POPULARITY OF DIFFERENT ADVERTISING MEDIA AMONG FREQUENT AND INFREQUENT
LIVE THEATRE ATTENDERS

Number of Responses/% of Total Responses

	<u>1</u> The <u>Journal</u>	<u>2</u> The <u>Sun</u>	<u>3</u> <u>Billboards</u>	<u>4</u> <u>Flyers</u>	<u>5</u> <u>The Gateway</u>	<u>6</u> <u>TV/ Radio</u>	<u>7</u> <u>Nightlife Poster</u>	<u>8</u> <u>SUB Cal.</u>	<u>9</u> <u>Word of Mouth</u>	Total
I Frequent Attenders	80/50.6	3/50.0	21/53.9	18/45.0	2/35.0	12/44.4	12/60.0	6/1.4	35/55.7	194/55.6
II Infrequent Attenders	78/49.4	3/50.0	18/46.1	22/55.0	13/65.0	15/55.6	8/40.0	22/78.6	28/44.4	207/51.6
Total	158/100.0	6/100.0	39/100.0	40/100.0	20/100.0	27/100.0	20/100.0	28/100.0	63/100.0	401/100.0

of popularity of the media sources among subscribers and non-subscribers (Table IV-18). As in the previous test, the degrees of media popularity followed about the same trends which caused the acceptance of all null-hypotheses of independence for 5 conducted tests (Table 27, Tests 61-65).

The popularity of theatre brochures, however, was higher for theatre subscribers than for frequent attenders (15% vs. 9%), very close to word of mouth (17%). Naturally, this was an expected result as subscribers as a rule do attend theatre performances outlined in their brochures on the scheduled dates.

To summarize, for almost all of the examined subgroups (all age groups, frequent and infrequent attenders, subscribers and non-subscribers) as well as for the whole population, The Edmonton Journal was found to be the most popular source of information about live theatre. The Edmonton Sun was the least popular. Word of mouth was second to the Journal followed by the brochure. The University sources of advertising were among the least popular.

EFFECTS OF THEATRE REVIEWS ON THEATRE ATTENDANCE

The average degree of influence of theatre reviews on theatre attendance was evaluated on the basis of results compiled in Table 9 and amounted to 2.9. This outcome means that if the review is positive/negative, there is a 50/50 chance for an individual to go and see the play. This result closely follows the findings of Padfield (1980), as

TABLE IV-18

POPULARITY OF DIFFERENT ADVERTISING MEDIA AMONG LIVE THEATRE SUBSCRIBERS
AND NON-SUBSCRIBERS

Number of Responses/% of Total Responses									
	1 The Journal	2 The Sun	3 Billboards	4 Flyers	5 The Gateway	6 TV/ Radio	7 Nightlife Poster	8 Sub Cal.	9 Word of Mouth
I Subscribers	35/22.2	0/00.0	6/15.4	12/30.0	3/15.0	6/22.2	4/20.0	2/7.1	14/22.2
II Non-Subscribers	123/77.8	6/100.0	33/84.6	28/70.0	17/85.0	21/77.8	16/80.0	26/92.6	49/77.8
Total	158/400.0	6/100.0	39/100.0	40/100.0	29/100.0	27/100.0	29/100.0	28/100.0	63/100.0

concluded that attendance is sometimes affected by the review.

PREFERRED WAYS OF BUYING THEATRE TICKETS

Table 10 indicates that most of the university population purchases its tickets in advance. The next most popular way is buying tickets at the door, followed by subscription. For frequent theatre patrons, the sequence was found to be different (Table 18). While the majority of them still indicated that most of the time they buy their tickets in advance, subscription was next in popularity. In fact, comparing only the prime choices of frequent and infrequent attenders (Table IV-19), it was found that the buying practices of theatre patrons depended on the frequency of their attendance. While the frequent attenders most often bought their tickets in advance and by subscription, the infrequent attenders tended to buy their tickets either in advance or at the door. This response structure caused rejection of the null-hypothesis of the χ^2 test for these populations (Table 27, Tests 50,51), indicating that there was a 95% probability that the buying habit of a theatre attender depends on the frequency of his/her attendance.

A similar analysis of the buying practices of theatre subscribers was conducted in addition to the above tests. Again, the buying practices of theatre subscribers and non-subscribers showed a great degree of variance. Comparing only first choices (Table IV-20), 44 out of 78 subscribers (56%)

TABLE IV-19

DISTRIBUTION OF BUYING PRACTICES AMONG FREQUENT AND INFREQUENT LIVE
THEATRE ATTENDERS

Number of Responses/% of Total Responses				
	¹ In Advance	² At the Door	³ By Subscription	Total
I Frequent Attendees	110/48.7	18/28.1	52/89.7	180/51.7
II Infrequent Attendees	116/51.3	46/71.9	6/10.3	168/48.3
Total	226/100.0	64/100.0	58/100.0	348/100.0

Note: χ^2 independence test rejected at 95% for variables:

¹ - ² and I, II
¹ - ³ and I, II.

TABLE IV-20

DISTRIBUTION OF BUYING PRACTICES AMONG LIVE THEATRE SUBSCRIBERS AND NON-SUBSCRIBERS

Number of Responses/% of Total Responses

	1 In Advance	2 At the Door	3 By Subscription	Total
I Subscribers	31/13.7	3/4.7	44/75.9	78/22.4
II Non-Subscribers	195/86.3	61/95.3	14/24.1	270/77.6
Total	226/100.0	64/100.0	58/100.0	348/100.0

Note: χ^2 independence test rejected at 95% for variables:

1 - 3 and I, II
 1 - 2 and I, III.

obtained their tickets mainly through subscriptions, while most of the non-subscribers bought their tickets in advance (195 out of 270). And again the χ^2 test of independence showed rejection of H_0 (Table 27, Tests 66,67).

The distribution of ticket buying practices among attenders of different age groups is presented in Table IV-21.

The "in advance" form of getting theatre tickets was the most popular for each of the four age groups. The subscription form, however, constituted only 8% of the total number of respondents to this question from the under 20 bracket, the fraction increased to 18% for the group from 20 to 25 years of age, to 23% for the rest (the older part) of the population. This increase in subscription with age, however, was not sufficient to reject the H_0 in the χ^2 Tests 68 and 69 (Table 27). Consequently, it can be concluded that individuals of all ages in the university population tended to prefer to buy their tickets in advance, followed by "at the door", and then by subscription.

To summarize, while the overall preference for theatre ticket buying was (in this order)

- 1) in advance,
- 2) at the door,
- 3) by subscription,

the frequent attenders bought their tickets by subscription more often than at the door. Naturally, theatre subscribers tended to buy their tickets through subscriptions, followed by "in advance" and "at the door". The distribution of

TABLE IV-21

DISTRIBUTION OF TICKET BUYING PRACTICES AMONG
ATTENDERS OF DIFFERENT AGE GROUPS

	Number of Responses/% of Total Responses				
	<u>I</u> <u>< 20</u>	<u>II</u> <u>20-25</u>	<u>III</u> <u>26-40</u>	<u>IV</u> <u>>40</u>	<u>Total</u>
1. Inadvance	57/77.0	133/64.2	29/54.8	6/46.2	225 /64.8
2. At the Door	11/14.9	37/17.9	12/22.6	4/30.8	64 /18.4
3. Subscription	6/8.1	37/17.9	12/22.6	3/23.0	58 /16.8
Total	74/100.0	207/ 100.0	53/ 100.0	13 / 100.0	347/ 100.0

ticket buying among attenders of all age groups was similar to that of the overall population.

DISTRIBUTION OF RESPONDENTS BY AREA OF STUDY AND AGE

Table 11 shows the distribution of respondents by area of study. The majority of the replies came from the arts faculty. These students obviously have a higher degree of association with arts in general and live theatre in particular, hence, the higher response rate among them was not surprising. Education and science were second and third, respectively. Locations of the polling stations did cover the major portion of the University campus and there existed very little source for an unsystematic error in handling the collection of the survey results as related to different faculties.

Table 12 shows the age distribution among the respondents. The highest number of respondents were in the 20 to 25 age bracket. The obtained distribution was compared with the total university population (Table 26). The comparison of the sampled to the actual fractions showed that the procured sample adequately represented the overall population, except for the age group of 40 and older. The sampled fraction of the latter age group was twice as high as the actual proportion, which should serve as an indication of a higher degree of interest toward live theatre among the over 40 population. In fact, as it is shown in Table IV-22, 67% of the total group of the respondents from this group were frequent attenders, the highest rate of

TABLE IV-22
DISTRIBUTION OF FREQUENT LIVE THEATRE
ATTENDERS*BY AGE

Number of Responses/% of Total Responses

	<u>I</u> <u><20</u>	<u>II</u> <u>20-25</u>	<u>III</u> <u>26-40</u>	<u>IV</u> <u>>40</u>	<u>Total</u>
1. Frequent Attenders	36/42.3	113/51.4	27 /49.1	10/66.7	186/49.6
2. Infrequent Attenders	49/57.7	107/48.6	28/50.9	5/33.3	189/50.4
Total	85/100.0	220/ 100.0	55/ 100.0	15/ 100.0	375/ 100.0

* Defined here as patrons attending live theatre four or more times a year.

all age groups. It should be remembered, however, that these results were obtained in relation to the university population and should not be applied to population at large.

CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

Kotler (1975) in his analysis of marketing for non-profit organizations, stated that the marketing orientation of nonprofit organizations should produce the "major benefits of better survival and growth"⁽¹⁸⁾ for them. The philosophy of marketing orientation is based on the premise of selling not what you want to sell, but rather what the market wants to buy. The marketing concept which Kotler defines as "consumers' needs orientation backed by integrated marketing aimed at generating consumer satisfaction as the key to satisfying organizational goals"⁽¹⁹⁾ can serve as the cornerstone of an effective marketing orientation which forms the basis for an organizational strategy. Predicated on market analysis, its implementation consists of two steps:

- 1) market structure analysis;
- 2) consumer analysis.

While the former was the object of research for a great number of audience studies, this thesis makes its policy recommendations for a specific market segment, university students, with regard to the latter aspect of the market analysis. As it deals with no specific theatrical institution, this study concentrates on only two facets of consumer analysis, namely needs and preferences, which serve as a basis for arriving at the most effective

instruments of marketing mix designed to attract this segment to live theatre. As suggested by Kotler, the marketing mix will be viewed in terms of four components:

- 1) product;
- 2) price;
- 3) distribution;
- 4) promotion.

The survey showed that, more often than any other reason, lack of time and money precluded university students from attending live theatre more frequently. Therefore, theatrical institutions should pay special heed to solving both problems, rather than solving only one of them by offering Sunday matinee discounts. This policy may have a very limited appeal to busy students who cannot attend at the time when the discount is offered. Consequently, if students are the target market for live theatre (and they should be if the long-term wellbeing is of concern) a more generous allotment of student seats should be instituted i.e. for weeknights and perhaps even weekends. This policy may seem to be impractical for theatres with sold out houses. On the other hand, they, too, would have to be vigilant against making their subscribers a purified breed of theatre goers detached from the public at large, and in particular, from the new blood of young theatre goers. For young theatrical organizations that suffer from limited attendance, it would not make good business sense to have an empty seat for \$10 on a Saturday night rather

than offering it to a student for \$5. A customer based price discrimination policy, contingent on availability of tickets, say 30 minutes before performances (rush seats) at all times, will prove fruitful in achieving the long-term audience build-up for more established organizations, and the short and long-term audience development for young theatrical institutions.

It can be argued, however, that this approach will do nothing to attract students to become season subscribers, as they would always be able to buy their single tickets at a discount. The survey shows that since the current live theatre subscribership is rather small, there is a definite potential for an increase. In order to provide incentives for students to commit themselves to the whole year of attendance, theatre administrators have to design the pricing system in such a way that subscription will still be a better deal considering the total price of discounted single tickets. And again a limited number of seats should be available for students to subscribe for any day of the week. This system may seem costly to institute. On the other hand, once designed, the formula can be reapplied year after year, season after season, at which time it will cost no more than any other scheme. The discount rate should be expressed as a percentage of the regular price to preserve the price differential reflecting the levels of demand for different days of the week.

Therefore, it may seem that once an attractive pricing policy is put in place, students will start flocking into theatres. The survey showed, however, that price was not the most important reason for buying a subscription, neither was the convenience or continuation of last year's subscription. The most important reason was season content. This result suggests that student audiences can drop subscriptions to one theatre for another if the second theatre has a more attractive season. Therefore, if the content appeals to students and they know that they are getting a good deal price and time-wise, a higher degree of commitment for live theatre can be achieved on the part of this segment. In fact, play content was viewed as most important for any attendance, single or by subscription. It was by far more popular a reason for attendance than a star, author, special effects, theatre location and even ticket price. Consequently, in allocating funds for these new seasons, theatrical organizations should spend more on better plays from popular genres than on stars or fancy locations.

To qualify this argument, the survey showed that comedy and serious drama were the most popular theatrical genres ahead of fantasy, musical or mystery. While subscribers and frequent attenders preferred serious drama, the infrequent attenders preferred comedy as their prime choice. This finding can serve as a basis for deciding what plays should be played to attract a higher number of spectators from this market segment. If a theatre is

standing on very shaky grounds and attendance at all costs is imperative, it probably would be prudent to attract the portion of the market that already attends theatre on a frequent basis, in which case concentration on serious drama may prove wise. A more established theatre, however, searching for additional attendance may want to perform a higher number of comedies to attract infrequent attenders.

Expanding on the season content, the survey respondents expressed their desire to see more Canadian plays in theatre repertoires. It is important to realize, however, that as the number of high quality material written by Canadian playwrights can be limited in relation to that of their counterparts from the rest of the world, taking this result for its face value may do more harm than good. The quality of a play, its content, rather than origin, as testified by the survey, is of the utmost importance for theatres in trying to attract additional audiences to their performances.

All the above aspects have to be carefully analyzed when launching a promotional campaign. As suggested by Kotler (1975) the following three components should be present in message development for advertising:

- 1) theme selection;
- 2) message structure;
- 3) copy, layout and production.

Each of the above steps is equally important as no successful advertising campaign can have good theme selection and message structure with poor layout and an

unattractive copy. In fact, as Newman (1977) pointed out, in arranging the layout of an ad, one has to place the most important message right in front to effectively convey it to the target group.

Consequently, messages conveying an interesting variety in theatrical repertoire, such as,

"Join us for a season of exciting drama and hilarious comedy."

or

"Experience the excitement of a world premier of a drama written by a well known Canadian playwright in our theatre."

may prove effective in attracting university students to live theatre, particularly, if supported by a prominently placed message such as,

"If you have time, we've got a 30% discount any day or night for full-time students."

Nevertheless, no ad can be successful if presented through the wrong media category (newspaper vs. T.V. vs. brochure, etc.) or media vehicle within a category (e.g. The Edmonton Journal vs. The Edmonton Sun within the category of newspapers). The survey shows that The Edmonton Journal was the most popular advertising vehicle for the university market. The second most popular source was word of mouth. In addition, it was found that brochures were popular among theatre subscribers, which in a way concurs with Newman's (1977) argument about the all mighty power of a brochure for subscription drives. The university sources of advertisement were not nearly as popular as The Journal

or word of mouth. It's important to realize, however, that they do represent a relatively inexpensive source of advertisement, and, hence they can prove effective as a high number of exposures can be achieved for a relatively low average cost per advertising exposure helping to maintain the advertising budget at a reasonably low level.

The question of distribution of advertising material is of great importance. While theatres have little control over the distribution of newspapers or radio and TV ads, they do coordinate distribution of their own flyers. In this case procurement of lists of subscribers to events such as symphony, opera, ballet and other theatres are absolutely imperative, as a great degree of intersubscribership exists between these events as attested to by the survey. Efficient distribution of promotional material not only reduced advertising costs but secures continuous attendance and patronage of live theatre performances.

Furthermore, advance ticket outlets represent a good medium for distribution of promotional material as well. The survey showed that the majority of students buy theatre tickets in advance rather than at the door or by subscription. By extending this observation to other forms of performing arts, it can be concluded that by having theatre brochures exhibited in these locations, patrons of other events will be able to get informed about the upcoming performances as well. This policy concerns single ticket buyers only. The ultimate objective of any theatre,

however, should be to change the status quo and increase the subscribership rate among students. This objective can be achieved through an introduction of mini-subscriptions. If a theatre has 5 performances in a season, it can, and should, continue selling subscriptions after the first, second and third performances at adjusted prices. This program can serve two purposes:

- 1) secure current season attendance;
- 2) expand future seasons subscribership base.

The ground-rules for this policy should be as follows:

- 1) the attractiveness of subscription should decrease as season progresses;
- 2) buying any subscription should be more attractive than buying single tickets;
- 3) the subscription packages should be prominently and effectively displayed and promoted;
- 4) the subscription packages should be readily available at the common distribution outlets.

In addition to establishing the most effective scheme for utilization of advertising media categories and vehicles within these categories supported by an institutionalized campaign for distribution of brochures, a concerted effort should be made to evaluate the most efficient timing for these campaigns. Answers to questions like:

- 1) What is the best timing for launching a subscribership campaign?

- 2) How far in advance and how frequently should live theatre advertise its upcoming or current event?
- 3) What should be the relative distribution of frequencies between different vehicles and categories?

Answers to these questions are important in attempting to attract not only university students but other market segments as well.

It was also found that a high degree of intersubscriber-ship exists between classical music events and movie theatre membership on one side and live theatres on the other. Subscribers lists for these institutions should be utilized in identifying the recipients of subscription brochures for live theatres as well.

Live theatre is a very popular form of entertainment among students as attested to by the survey. This fact, combined with an effective marketing strategy based on the consumers' needs designed to provide them with maximum satisfaction, should expand the cross-section of the theatre going population and facilitate the attainment of the long-term audience build-up objective.

Results of this exploratory study may not apply to other university populations. Future research is needed to confirm the findings of this study. In addition, implementation of its recommendations will serve as a further indication of their validity.

Further research can be focused on the expansion of the general findings on socio-demographic characteristics of theatre attending audiences to the university environment. In addition, a lesson should be learned from the limitations of this study. Future research should be vigilant against these limitations which will facilitate the evaluation of their impact on this study.

FOOTNOTES

1. DiMaggio, P., Useem, M., Brown P. Audience Studies of the Performing Arts and Museums: A Critical Review. Washington, D.C.: National Endowment for the Arts, 1978, p. 3.
2. Newman, D. Subscribe Now! New York: Theatre Communications Group, Inc., 1977, p. 52.
3. Heitmann, G., Crocken, W.E. "Theatre Audience Composition, Preferences and Perceptions." California Management Review, 1976, 19(2), Winter, p. 89.
4. Ibid.
5. Imperial Oil Ltd. A Memorandum to the Federal Cultural Policy Review Committee, Unpublished paper, March 9, 1981, p. 6.
6. Book, S.H. Globerman, S. The Audience for the Performing Arts: A Study of the Attendance Patterns in Ontario. Toronto: Ontario Arts Council, 1975, p. 11.
7. Ibid. P. 13.
8. Padfield, C.A.F. The Performing Arts in Edmonton: A Survey of Selected Audiences. University of Alberta, Unpublished Study, 1980, p. 28.
9. Book et al, op. cit., p. 14.
10. Baumol, W.J., Bowen, W.G. Performing Arts - The Economic Dilemma. New York: The Twentieth Century Fund, 1966, p. 94.
11. Newman, op. cit., p. 229.
12. Ibid. P. 101.
13. Ibid. P. 103.
14. Padfield, C.A.F. The Performing Arts in Edmonton: An Important Industry. University of Alberta, Unpublished Study, 1981, p. 7.
15. DiMaggio et al, op. cit., P. 42.
16. Book et al, op. cit., p. 123.
17. Heitmann et al, op. cit., p. 90.

18. Kotler, P. Marketing for Nonprofit Organizations. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1975, p. 38.
19. Ibid. P. 46.

BIBLIOGRAPHY

- ANDERSEN, A.R., BELK, R.W. "Predictors of Attendance at the Performing Arts." The Journal of Consumer Research, 1980, 7(2), 112-119.
- BAUMOL, W.J., BOWEN, W.G. Performing Arts - The Economic Dilemma. New York: The Twentieth Century Fund, 1966.
- BOOK, S.M., GLOBERMAN, S. The Audience for the Performing Arts: A Study of the Attendance Patterns in Ontario. Toronto: Ontario Arts Council, 1975.
- BRADLEY, I.M. Performing Arts Audiences: (Emphasis on Theatre Audiences). Ottawa: Arts and Culture Branch, Secretary of State Department, 1979.
- BRADLEY, I.M., WARD, M. The Nature of Exposure to the Performing Arts Among Audiences in 16 Canadian Communities. Ottawa: Arts and Culture Branch, Secretary of State Department, 1979.
- BRADLEY, I.M., WARD, M. An Overview: Performing Arts Audience Survey, Summer, 1978. Ottawa: Arts and Culture Branch, Secretary of State Department, 1979.
- CROOKS, M.M. Cultural Participation in Edmonton. Ottawa: Arts and Culture Branch, Secretary of State Department, 1979.
- CURIM, I.S., WEINBERG, C.B., WHITTIUK, D.R. "Design of Subscription Programs for a Reforming Arts Series." The Journal of Consumer Research, 1981, 8(1), 67-75.
- DIMAGGIO, P., UNSEEM, M., BROWN, P. Audience Studies of the Performing Arts and Museums: A Critical Review. Washington, D.C.: National Endowment for the Arts, 1978.
- HEITMANN, G., CROCKEN, W.E. "Theatre Audience Composition Preferences and Perceptions." California Management Review, 1976, 19(2), Winter, 85-90.
- IMPERIAL OIL LTD. A Memorandum to the Federal Cultural Policy Review Committee, Unpublished Paper, March 9, 1981.
- KOTLER, P. Marketing for Nonprofit Organizations. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1975.

- MOKWA, M.P., DAWSON, W.M., PRIEVE, E.A. Marketing the Arts. New York: Praeger Publishers, 1980.
- NEWMAN, D. Subscribe Now! New York: Theatre Communications Group, Inc., 1977.
- PADFIELD, C.A.F. The Performing Arts in Edmonton: A Survey of Selected Audiences. University of Alberta, Unpublished Study, 1980.
- PADFIELD, C.A.F. The Performing Arts in Edmonton: An Important Industry. University of Alberta, Unpublished Study, 1981.
- RYANS, A.B., WEINBERG, C.B. "Consumer Dynamics in Nonprofit Organizations." The Journal of Consumer Research, 1978, 5(2), 89-95.
- THROSBY, C.D., WITHERS, G.A. The Economics of the Performing Arts, New York: St. Martin's Press, 1979.
- WEINBERG, C.B., SHACHMUT, K.M. "Arts Plan: A Model Based System for Use in Planning a Performing Arts Series." Management Science, 1978, 24(6), 654-664.
- WONNACOTT, T.M., WONNACOTT, R.J. Introductory Statistics for Business Economics. New York: John Wiley and Sons, Inc., 1977.

APPENDIX A

THE SURVEY

THE SURVEYPHOENIX THEATRE - A BIRD OF A
DIFFERENT FEATHER

Win one of 10 free subscriptions to the first exciting season at the PHOENIX THEATRE, by simply filling out a questionnaire below and dropping it off at one of our polling stations in HUB, SUB, CAB, Fine Arts and Mechanical Engineering Buildings on Wednesday, October 28 between 10 a.m. and 4 p.m.

- I. How many times a year do you attend live theatre?
- II. How many times a year would you like to attend live theatre?
- III. If there is a difference between I and II, please explain.
- IV. If you had \$10, how would you spent it (list in the order of preference with "1" as most preferred)?
Preference
 - a) Snacks and drinks outside the home.
 - b) Sporting event.
 - c) Live theatre.
 - d) Symphony/Opera.
 - e) Other (specify).
- V. List all the events that you have subscribed for in the 1981/82 season (including sports, live theatre, movie theatre memberships).
- VI. List other events that you would like to subscribe for.

VII. Indicate the importance of the following reasons for buying a subscription.

1	2	3	4	5
Not Important				Very Important

Importance

- a) Ticket availability
(avoid sellout)
- b) Convenience
- c) Price incentive
- d) Seating advantage
- e) Continuation of last year's subscription
- f) Seasons content
- g) Other (specify)

VIII. Indicate the importance you attach to each of the following (list in the order of importance with "1" as most important).

Importance

- a) Content of a play
- b) Star(s)
- c) Special effects
- d) Author
- e) Theatre location
- f) Ticket price
- g) Other (specify)

IX. What type(s) of plays do you like (list in the order of preference with "1" as most preferred)?

Part I

Preference

- a) Serious drama
- b) Comedy
- c) Fantasy
- d) Musical
- e) Mystery

Part II

- a) Canadian
- b) American
- c) British
- d) Other European (specify)
- e) Other (specify)

X. What would you prefer (list in the order of preference with "1" as most preferred)?

Preference

- a) Weeknight ticket for \$7
 - b) Weekday matinee for \$4
 - c) Weekend evening for \$9
 - d) Weekend matinee for \$5
 - e) Opening night with wine
and cheese party for \$12

XI. Where do you get your information about live theatre in Edmonton (rate in the order of frequency with "1" as the most frequent source).

Rate of Frequency

- a) The Edmonton Journal
 - b) The Edmonton Sun
 - c) Billboards
 - d) Flyers
 - e) The Gateway
 - f) Radio or T.V.
 - g) Nightlife poster
 - h) SUB Calendar
 - i) Word of Mouth
 - j) Other (specify)

XII. Do theatre reviews affect your decision to attend?

XIV. How do you buy your theatre tickets (list in the order of frequency with "1" as most frequent).

Rate of Frequency

- a) In advance
 - b) At the door
 - c) By subscription
 - d) Other

XIV. Are you aware of the Phoenix Theatre program?

Yes _____

No _____

XV. If the answer to (XIV) is YES, what plays do you plan to attend?

XVI. Performances of the Phoenix will take place in SUB; is this location convenient to you?

- a) Yes _____
- b) No _____
- c) Don't care _____

XVII. How often did you attend the Citadel last season?

XVIII. Indicate what you liked/disliked at the Citadel.

Liked

Disliked

XIX. How often did you attend Theatre 3 last season?

XX. Indicate what you liked/disliked at Theatre 3.

Liked Disliked

- a) Atmosphere
- b) Selection of plays
- c) Players
- d) Staging
- e) Location
- f) Ticket price

XXI. What faculty are you from?

XXII. What age group are you in?

- a) Under 20 _____
- b) 20-25 _____
- c) 26-40 _____
- d) Over 40 _____

Thank you!

APPENDIX B

TABLES OF SURVEY RESULTS

TABLE 1

MARKET POTENTIAL FOR LIVE THEATRE

Number of Times Per Year	NUMBER OF RESPONDENTS								
	0	1	2	3	4	5	6-10	11-22	23+
Current Attendance	49	58	47	35	39	34	74	21	19
Desired Attendance	4	8	20	14	18	25	134	82	71

REASONS FOR THE DIFFERENCE BETWEEN
ACTUAL AND DESIRED ATTENDANCE

	No Money	No Time	No Motivation	Theatre Quality	Other
Number of responses	155	140	29	25	78

TABLE 2

ENTERTAINMENT PREFERENCE FOR THE VALUE OF \$10.00

Preference	Number of Respondents				
	Snacks & Drinks	Sporting Events	Live Theatre	Symphony/Opera	Cinema*
1	75	51	114	44	31
2	47	42	103	50	24
3	66	45	70	45	13
4	44	59	19	77	13
5	24	50	0	44	4
					13

* Not specifically mentioned in the questionnaire

TABLE 3

CURRENT AND POTENTIAL SUBSCRIPTION TO VARIOUS EVENTSNumber of Subscriptions

	Sporting Events	Symphony/Chamber music/ Opera/Ballet	NFT/Princess Membership	Live Theatre	Other
Actual	56	45	57	94	29
Desired	64	84	42	164	46

TABLE 4

REASONS FOR BUYING SEASON SUBSCRIPTIONS

Reasons	Importance not important	Number of Responses				
		1	2	3	4	5 very important
Ticket availability	22	36	56	94	88	
Convenience	22	39	84	110	80	
Price Incentive	19	32	88	103	80	
Seating Advantage	23	36	68	109	91	
Continuation of last year's subscription	111	57	63	28	24	
Season Content	29	24	58	70	121	

TABLE 5

THE RANKING OF REASONS FOR ATTENDING LIVE THEATRE

RANK	Play Content	Star(s)	Number of Respondents			
			Special Effects	Author	Theatre Location	Ticket Price
1	300	14	7	22	16	25
2	37	96	40	86	36	68
3	8	84	51	67	68	88
4	8	60	67	64	56	67
5	14	53	82	55	76	51
6	2	28	69	42	80	39

TABLE 6

PLAY PREFERENCE BY TYPE AND ORIGIN

Play Type	Preference most preferred	Number of Respondents				
		1	2	3	4	5 least preferred
Serious drama	130	68	66	44	33	
Comedy	139	122	53	22	8	
Fantasy	13	36	68	98	105	
Musical	59	59	62	71	78	
Mystery	23	50	100	78	72	
<u>Play Origin</u>						
Canada	125	76	43	32	2	
U.S.A.	61	82	86	30	0	
Britain	86	71	79	23	0	
Other European	20	35	43	92	1	

TABLE 7

TICKET PREFERENCE FOR DIFFERENT DAYS AT DIFFERENT PRICES

		<u>Number of Responses</u>					
		Preference	1	2	3	4	5
Ticket Type	Preference						
\$7 Weeknight		107	117	70	23	4	
\$4 Weekday Matinee		20	21	35	96	111	
\$9 Weekend Evening		119	87	70	41	10	
\$5 Weekend Matinee		85	52	73	79	11	
\$12 Opening Night		45	32	40	36	117	

TABLE 8

EFFECTIVENESS OF VARIOUS ADVERTISING MEDIA SOURCES

Source	Rank	Number of Responses							9
		1	2	3	4	5	6	7	
Edmonton Journal	158	68	23	27	16	12	14	12	4
Edmonton Sun	6	29	23	9	26	12	22	29	34
Billboards	39	28	35	26	24	27	21	18	6
Flyers	40	21	24	36	27	30	32	14	9
The Gateway	20	36	42	26	37	23	19	16	14
Radio and T.V.	27	43	47	35	33	26	24	10	5
The Nightlife Poster	20	29	36	31	24	17	16	18	21
Sub Calendar	28	34	43	42	30	21	13	19	8
Word of Mouth	63	41	42	49	24	28	6	9	20

TABLE 9

INFLUENCE OF THEATRE REVIEWS ON DECISION TO ATTEND

	1 not at all	2	3	4	5 very much
Number of Responses	42	82	133	83	22

TABLE 10

PREFERRED WAYS OF BUYING THEATRE TICKETS

Rank	1	2	3
Buying Preference			
In advance	226	78	16
At the door	64	149	69
By subscription	58	43	130

TABLE 11

DISTRIBUTION OF RESPONDENTS BY AREA OF STUDY

Area	Number of Respondents
Arts and Fine Art	111
Law	19
Education	61
Science	65
Commerce	31
Household Economics	35
Graduate Studies	23

TABLE 12

AGE DISTRIBUTION OF RESPONDENTS

<u>Age (years)</u>	<u>Number of Respondents</u>
Under 20	85
20 - 25	220
26 - 40	55
Over 40	15

TABLE 13

POPULARITY OF PROMOTIONAL VEHICLES AMONG RESPONDENTS OF THE UNDER-20 AGE BRACKET

Ranking of Importance	Important	1	2	3	4	5	6	7	8	Unimportant	Total
	The Journal	The Sun	Billboards	Flyers	Gateway	TV Poster	Radio Poster	Nightlife	SUB Calendar	Word of Mouth	
	43.1/32	10.0/5	13.6/8	14.3/8	15.2/9	11.5/7	13.5/7	20.0/12	25.8/17		
	21.6/16	14.0/7	15.3/9	5.4/3	13.5/8	11.5/7	7.8/4	10.0/6	12.1/8		
	5.4/4	8.0/4	13.5/8	8.9/5	6.8/4	18.0/11	19.2/10	16.7/10	19.7/13		
	6.8/5	4.0/2	13.5/8	14.3/8	13.6/8	13.1/8	9.6/5	20.0/12	12.1/8		
	6.8/5	8.0/4	13.5/8	14.3/8	15.2/9	14.8/9	13.5/7	10.0/6	6.1/4		
	6.8/5	6.0/3	11.9/7	17.8/10	8.5/5	14.8/9	3.8/2	5.0/3	7.6/5		
	2.7/2	16.0/8	8.5/5	10.7/6	17.0/10	9.8/6	11.5/6	3.3/2	1.5/1		
	5.4/4	14.0/7	8.5/5	12.5/7	3.4/2	1.6/1	11.5/6	11.7/7	1.5/1		
	1.4/1	20.0/10	1.7/1	1.8/1	6.8/4	4.9/3	9.6/5	3.3/2	13.6/9		
	Total	100/74	100/50	100/59	100/56	100/59	100/61	100/52	100/60	100/66	

TABLE 14

POPULARITY OF PROMOTIONAL VEHICLES AMONG RESPONDENTS OF THE 20 - 25 AGE BRACKET

Ranking of Importance	The Journal	The Sun	Billboards	Flyers	The Gateway	TV Radio	Nightlife Poster	SUB Calendar	Word of Mouth
1	44.5/89	0.8/9	16.9/23	16.8/24	5.4/8	10.0/5	7.5/10	8.5/15	22.7/39
2	20.0/40	14.8/18	11.7/16	10.6/15	13.6/20	18.8/28	15.6/21	15.8/24	15.1/26
3	7.5/15	13.9/17	15.3/21	10.6/15	22.5/33	19.5/29	14.9/20	17.8/27	13.4/23
4	10.0/20	4.9/6	13.1/18	16.2/23	10.2/15	14.1/21	14.9/20	16.5/25	18.0/31
5	4.5/9	16.4/20	10.2/14	11.3/16	17.0/25	12.1/18	11.2/15	14.5/22	8.7/15
6	3.5/7	6.6/8	10.9/15	12.0/17	10.9/16	9.4/14	9.0/12	11.2/17	10.5/18
7	5.5/11	9.0/11	11.7/16	14.1/20	5.5/8	10.1/15	6.0/8	5.9/9	2.3/4
8	3.0/6	16.4/20	7.3/10	4.9/7	9.5/14	4.7/7	9.0/12	5.9/9	4.1/7
9	1.5/3	17.2/21	2.9/4	3.5/5	5.4/8	1.3/2	11.9/16	3.9/6	5.2/9
Unimportant									
Total	100/200	100/122	100/137	100/142	100/147	100/149	100/134	100/152	100/172

TABLE 15

POPULARITY OF PROMOTIONAL VEHICLES AMONG RESPONDENTS OF THE 26 - 40 AGE BRACKET		Ranking of Importance		% of Total Responses/		Number of Responses					
Important	Unimportant	The Journal	The Sun	Billboards	Flyers	The Gateway	TV/Radio	Nightlife Poster	SUB Calendar	Word of Mouth	
1	56.8/25	---	32.0/8	19.4/6	120/3	12.5/4	8.0/2	13.6/3	13.9/5		
2	25.0/11	18.7/3	12.0/3	6.4/2	28.0/7	15.6/5	16.0/4	9.1/2	16.7/6		
3	4.5/2	12.5/2	16.0/4	12.9/4	20.0/5	18.8/6	24.0/6	22.7/5	11.1/2		
4	4.6/2	6.3/1	-----	16.1/5	12.0/3	12.5/4	24.0/6	18.2/4	22.1/8		
5	4.5/2	12.5/2	8.0/2	9.7/5	12.0/3	15.6/5	8.0/2	9.1/2	11.1/4		
6	---/--	6.3/1	16.0/4	9.7/3	4.0/1	9.4/3	12.0/3	4.6/1	13.9/5		
7	2.3/1	12.5/2	-----	19.4/6	4.0/1	9.4/3	8.0/2	9.1/2	2.8/1		
8	2.3/1	12.5/2	12.0/3	-----	-----	6.2/2	-----	13.6/3	2.8/1		
9	-----	18.7/3	4.0/1	6.4/2	8.0/2	-----	-----	-----	5.6/2		
Total	100/44	100.16	100/25	100/31	100/25	100/32	100/25	100/22	100/36		

TABLE 16
POPULARITY OF PROMOTIONAL VEHICLES AMONG THEATRE SUBSCRIBERS*

Ranking of Importance	The Journal	The Sun	Billboards	Flyers	Gateway	TV/ Radio	Nightlife Poster	SUB Calendar	Word of Mouth
1 Important	50.0/35	---	17.2/6	25.0/12	7.1/3	11.5/6	10.0/4	5.0/2	24.2/14
2	20.0/14	20.5/7	11.4/4	12.6/6	9.5/4	21.1/11	22.5/9	17.5/7	12.1/7
3	7.1/5	5.9/2	11.4/4	14.6/7	14.3/6	25.0/13	17.5/7	12.5/5	17.2/10
4	7.1/5	5.9/2	11.4/4	14.6/7	4.8/2	17.3/9	2.5/1	17.5/7	25.9/15
5	5.7/4	17.7/6	14.3/5	8.3/4	19.1/8	3.9/2	12.5/5	17.5/7	10.3/6
6	2.9/2	5.9/2	14.3/5	8.3/4	19.1/8	5.8/3	15.0/6	7.5/3	5.2/3
7	2.9/2	14.7/5	11.4/4	8.3/4	9.5/4	9.6/5	2.5/1	10.0/4	1.7/1
8	4.3/3	5.9/2	5.7/2	8.3/4	7.1/3	1.9/1	7.5/3	10.0/4	1.7/1
9	-----	23.5/8	2.9/1	-----	9.5/4	3.9/2	10.0/4	2.5/1	1.7/1
Unimportant									
Total	100/70	100/34	100/35	100/48	100/42	100/52	100/40	100/40	100/58

* Subscribers defined here as respondents carrying at least one theatre subscription.

TABLE 17

POPULARITY OF PROMOTIONAL VEHICLES AMONG FREQUENT THEATRE PATRONS*

Ranking of Importance	The Journal	The Sun	Billboards	The Flyer	TV/Gateway	TV/Radio	Nightlife Poster	SUB Calendar	Word of Mouth	
Important	46.8/80	3.3/3	19.6/21	14.9/18	6.7/7	9.9/12	11.1/12	5.4/6	24.0/35	
1	20.5/35	14.4/13	9.3/10	11.6/14	11.4/12	20.7/25	15.7/17	13.5/15	15.8/23	
2	8.8/15	13.3/12	12.1/13	14.0/17	20.0/21	18.2/22	18.5/20	18.0/20	15.1/22	
3	9.9/17	3.3/3	10.3/11	16.5/20	7.6/8	13.2/16	13.0/14	21.7/24	20.5/30	
4	4.7/8	15.6/14	10.3/11	10.7/13	17.2/18	9.9/12	10.2/11	11.7/13	9.6/14	
5	2.3/4	6.7/6	12.2/13	9.1/11	13.3/14	9.9/12	11.1/12	10.8/12	8.2/12	
6	2.9/5	16.7/15	13.1/14	11.6/14	8.6/9	10.7/13	4.6/5	4.5/5	0.6/1	
7	3.5/6	8.9/8	10.3/11	6.6/8	7.6/8	5.8/7	5.6/6	9.9/11	2.1/3	
8	0.6/1	17.8/16	2.8/3	5.0/6	7.6/8	1.7/2	10.2/11	4.5/5	4.1/6	
Unimportant	Total	100/171	100/90	100/107	100/121	100/105	100/121	100/108	100/111	100/146

* Frequent Theatre Patrons are defined as patrons who attend live theatre 4 or more times a year.

TABLE 18

PURCHASING HABITS OF FREQUENT THEATRE PATRONS *

<u>Ranking of Frequency</u>	% of Total Responses/ Number of Responses		
	<u>In Advance</u>	<u>At the Door</u>	<u>By Subscription</u>
Most Frequent			
1	67.1/110	12.2/18	37.2/52
2	25.0/41	51.7/76	20.6/28
3	7.3/12	36.1/53	36.0/49
4**	0.6/1	--- --	5.2/7
Least Frequent			
Total	100/164	100/147	100/136

* Frequent Theatre Patrons are defined as patrons who attend live theatre 4 or more times a year.

** This category is present here due to the "Other" category on the questionnaire.

TABLE 19

PURCHASING HABITS OF THEATRE SUBSCRIBERS

<u>Ranking of Frequency</u>	% of Total Responses/ Number of Responses		
	<u>In Advance</u>	<u>At the Door</u>	<u>By Subscription</u>
1	45.6/31	5.6/3	64.6/44
2	44.1/30	33.3/18	17.7/12
3	10.3/7	61.1/33	17.7/12
Total	100/68	100/54	100/68

TABLE 20

ADDITIONAL SUBSCRIPTION SALES POTENTIAL
FOR CURRENT SUBSCRIPTION HOLDERS

<u>Number of Additional Subscriptions Desired</u>	<u>Number of Respondents (Subscribers)</u>
1	18
2	7
3	1
Total	26

TABLE 21

IMPORTANCE ATTRIBUTED TO DIFFERENT REASONS *
FOR BUYING SUBSCRIPTIONS BY CURRENT SUBSCRIBERS

<u>Factor</u>	<u>Music</u>	<u>Live Theatre</u>
Ticket Availability	3.34	3.66
Convenience	3.51	3.72
Price Incentive	3.41	3.59
Seating Advantages	3.88	3.60
Continuation of Last Year's Subscription	2.90	2.63
Season Content	3.94	3.87

* Computed on a scale of 1 to 5, with 5 being very important

TABLE 22

ATTITUDES TOWARD DRAMA BY AGE

<u>Preference</u> *.	% of Respondents/ Number of Respondents			
	<u>Under 20</u>	<u>20 - 25</u>	<u>26 - 40</u>	<u>Over 40</u>
1	28.0/21	39.7/81	46.9/23	46.2/6
2	18.7/14	19.6/40	22.5/11	23.1/3
3	20.0/15	20.6/42	14.3/7	15.3/2
4	10.0/15	10.3/21	12.2/6	7.7/1
5	13.3/10	9.8/20	4.1/2	7.7/1
Total	100/75	100/204	100,49	100/13

* 1 - most preferred

TABLE 23

ATTITUDES TOWARD COMEDY BY AGE

Preference *	% of Respondents/ Number of Respondents			
	<u>Under 20</u>	<u>20 - 25</u>	<u>26 - 40</u>	<u>Over 40</u>
1	45.9/34	41.7/86	30.0/15	30.8/4
2	36.5/27	35.0/72	34.0/17	38.5/5
3	9.5/7	14.1/29	30.0/15	15.3/2
4	8.1/6	5.8/12	4.0/2	15.4/2
5	----	3.4/7	2.0/1	----
Total	100/74	100/206	100/50	100/13

* 1 - most preferred

TABLE 24

ATTITUDES TOWARD DRAMA AND COMEDY
BY FREQUENT THEATRE PATRONS *

<u>Preference</u> **	% of Respondents/ Number of Respondents	
	<u>Drama</u>	<u>Comedy</u>
1	47.3/79	34.3/58
2	21.0/35	35.5/60
3	15.0/25	20.7/35
4	10.8/18	7.7/13
5	5.9/10	1.8/3
Total	100/167	100/169

* Frequent Theatre Patrons are defined as patrons who attend live theatre performances 4 or more times a year

** 1 - most preferred

TABLE 25

ATTITUDE TOWARD TICKET PRICE BY
FREQUENT THEATRE PATRONS*

<u>Level of Importance **</u>	<u>% of Frequent Theatre Patrons/ Number of Patrons</u>
1	6.5/11
2	15.9/27
3	28.2/48
4	14.7/25
5	17.6/30
6	15.9/27
7	1.2/2
Total Number	100/170

* Frequent Theatre Patrons are defined here as patrons who attend live theatre 4 or more times a year

** 1 - most important

TABLE 26

COMPARISON OF AGE DISTRIBUTION BETWEEN THE OVERALL
UNIVERSITY POPULATION AND RESPONDENTS' SAMPLE USING
NORMAL DISTRIBUTION

Age Group	Fraction of the University Population* π	Fraction of the Sample, p	Zo *	Zc	Test Results (H_0)
20	.27	.23	-1.73	\pm 1.96	Accept
20 - 25	.53	.58	1.93	\pm 1.96	Accept
25 - 40	.18	.15	-1.50	\pm 1.96	Accept
40	.02	.04	2.76	\mp 1.96	Reject

* Source: University Statistics for the 1981-1982 school year

** Source:

Notes:

- 1) Assume normal population
- 2) Assume a two-sided test at 95% confidence level
- 3) n=372 (one respondent did not qualify his/her age, and three respondents were staff members, not included in the university overall population sample.)
- 4) $G = \sqrt{\pi(1-\pi)}$, where π -fraction of university population under study.
- 5) H_0 : Fraction of the sample population for the age bracket under study is similar to that of the university population
 H_A : Otherwise

TABLE 27

SUMMARY OF STATISTICAL ANALYSIS, USING χ^2 METHOD

Test #	Source	Variables Compared	DF	χ^2	Test Results (H_0)	
					90%	
					95%	
1	Table IV-16	1 - 9 vs. I - IV	24	35.8	Reject	Accept
2	" "	1 - 2 vs. I - III	2	11.9	Reject	Reject
3	" "	1 - 9 vs. I - III	16	24.1	Reject	Accept
4	" "	1 - 8 vs. I - III	14	21.5	Reject	Accept
5	" "	3-5,8 vs. I - III	6	8.1	Accept	Accept
6	" "	3,9 vs. I - III	2	3.4	Accept	Accept
7	" "	1,9 vs. I - III	2	3.1	Accept	Accept
8	" "	1,8 vs. I - III	2	5.5	Reject	Accept
9	" "	1,5 vs. I - III	2	5.2	Reject	Accept
10	" "	1,4 vs. I - III	2	0.1	Accept	Accept
11	" "	1,3 vs. I - III	2	0.2	Accept	Accept
12	" "	1,6 vs. I - III	2	0.3	Accept	Accept
13	" "	1,7 vs. I - III	2	2.2	Accept	Accept
14	" "	1 - 9 vs. I,II	8	17.3	Reject	Reject
15	" "	3,4,5,8, vs I,II	3	6.8	Reject	Accept
16	Table IV-7	1 - 5 vs. I - IV	12	20.1	Reject	Accept
17	" "	1,2,4 vs. I - IV	6	11.5	Reject	Accept
18	" "	1,2 vs. I - IV	3	5.1	Accept	Accept
19	" "	1,2 vs. I - III	2	4.5	Accept	Accept
20	" "	1,2 vs. II - IV	2	2.1	Accept	Accept
21	" "	1,2 vs. II,III	1	1.8	Accept	Accept

TABLE 27 continued

Test #	Source	Variables Compared	DF	χ^2	Test Results 90%	95%
22	Table IV-7	1 - 5 vs. II,III	4	10.5	Reject	Reject
23	" "	1 - 5 vs. I,III	8	16.5	Reject	Reject
24	Table IV-10	1 - 4 vs. I - III	6	2.0	Accept	Accept
25	Table IV-13	1 - 5 vs. I - IV	12	7.4	Accept	Accept
26	Table IV-4	1 - 2 vs. I - IV	3	8.0	Reject	Reject
27	Table IV-22	1,2 vs. I - IV	3	3.8	Accept	Accept
28	" "	1,2 vs. I,II,III,IV	2	2.4	Accept	Accept
29	" "	1,2 vs. I,II	1	2.0	Accept	Accept
30	Table IV-3	1,2 vs. I,II	1	61.3	Reject	Reject
31	Table IV-2	1,2 vs. I,II	1	3.5	Reject	Accept
32	Table IV-5	1 - 6 vs. I,II	5	6.3	Accept	Accept
33	" "	1 - 5 vs. I,II	4	5.2	Accept	Accept
34	" "	3 - 6 vs. I,II	3	4.8	Accept	Accept
35	" "	3 - 5 vs. I,II	2	4.8	Reject	Accept
36	" "	1 - 3 vs. I,II	2	4.4	Accept	Accept
37	" "	3.4 vs. I,II	1	4.3	Reject	Reject
38	" "	4.5 vs. I,II	1	1.7	Accept	Accept
39	Table IV-8	1 - 5 vs. I,II	4	13.6	Reject	Reject
40	" "	1,2,4,5 vs I,II	3	12.8	Reject	Reject
41	" "	1,2,3 vs. I,II	2	12.5	Reject	Reject
42	" "	1,2 vs. I,II	1	9.7	Reject	Reject
43	Table IV-11	1 - 4 vs. I,II	3	11.4	Reject	Reject
44	" "	1 - 3 vs. I,II	2	11.0	Reject	Reject

TABLE 27 continued

Test No.	Source	Variables Compared	DF	χ^2	Test Results	
					90%	95%
45	Table IV-11	1,2 vs. I,II	1	10.9	Reject	Reject
46	" "	1,3 vs. I,II	1	0.8	Accept	Accept
47	" "	2,3 vs. I,II	1	5.5	Reject	Reject
48	Table IV-14	1 - 5 vs. I,II	4	5.5	Accept	Accept
49	Table IV-17	1 - 9 vs. I,II	8	13.1	Accept	Accept
50	Table IV-19	1,2 vs. I,II	1	8.5	Reject	Reject
51	" "	1 - 3 vs. I,II	2	48.5	Reject	Reject
52	Table IV-6	1 - 6 vs. I,II	5	4.8	Accept	Accept
53	Table IV-9	1 - 5 vs. I,II	4	11.7	Reject	Reject
54	" "	1,2,4 vs. I,II	2	11.0	Reject	Reject
55	" "	1,2,3,4, vs. I,II	3	11.4	Reject	Reject
56	" "	1,2 vs. I,II	1	10.4	Reject	Reject
57	Table IV-12	1 - 4 vs. I,II	3	3.1	Accept	Accept
58	" "	1 - 3 vs. I,II	2	3.1	Accept	Accept
59	" "	1,2 vs. I,II	1	0.6	Accept	Accept
60	Table IV-15	1 - 5 vs. I,II	4	0.6	Accept	Accept
61	Table IV-18	1 - 9 vs. I,II	8	8.3	Accept	Accept
62	" "	3 - 6 vs. I,II	3	3.1	Accept	Accept
63	" "	3 - 5 vs. I,II	3	6.4	Reject	Accept
64	" "	2 - 8 vs. I,II	6	8.0	Accept	Accept
65	" "	1,2 vs. I,II	1	1.7	Accept	Accept
66	Table IV-20	1 - 3 vs. I,II	2	116.7	Reject	Reject
67	" "	1 - 2 vs. I,II	1	3.9	Reject	Reject

TABLE 27 continued

Test No.	Source	Variables Compared	DF	χ^2	Test Results	
					90%	95%
68	Table IV-21	1 - 3 vs. I - III	4	8.1	Reject	Accept
69	" "	1 - 3 vs. I,II	2	5.0	Reject	Accept

B30333